

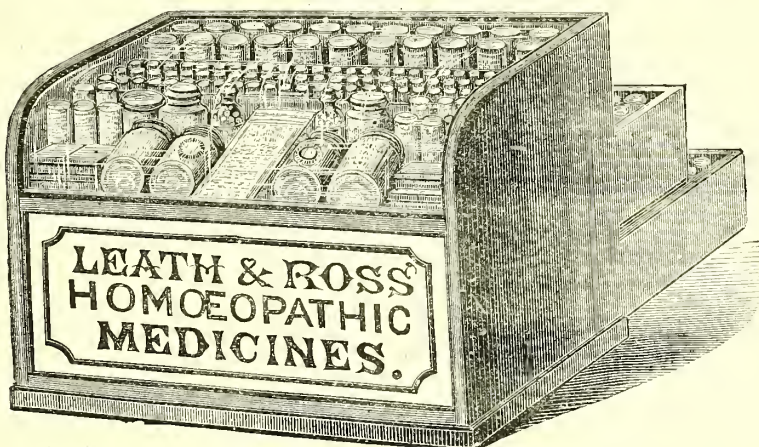
# LEATH & ROSS'S HOMŒOPATHIC PHARMACIES

9 VERE STREET, W.,  
And 5 ST. PAUL'S CHURCHYARD, E.C., LONDON.

OUR £10 10s. AGENTS' SHOW CASE.

Contents realise £17 17s. 8d.

DIMENSIONS.—Length, 18 in.;  
Breadth, 13 in.; Height, 13 in.



DESCRIPTION.—A Handsome Bent Glass Case, with three drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in the other two in alphabetical order.

## WHOLESALE PRICE LIST OF MEDICINES PUT UP READY FOR SALE.

### GLOBULES or PILULES—

Sixpenny Tubes	...	...	2/9 per dozen.
Ninepenny "	...	...	4/3 "
Shilling "	...	...	5/- "

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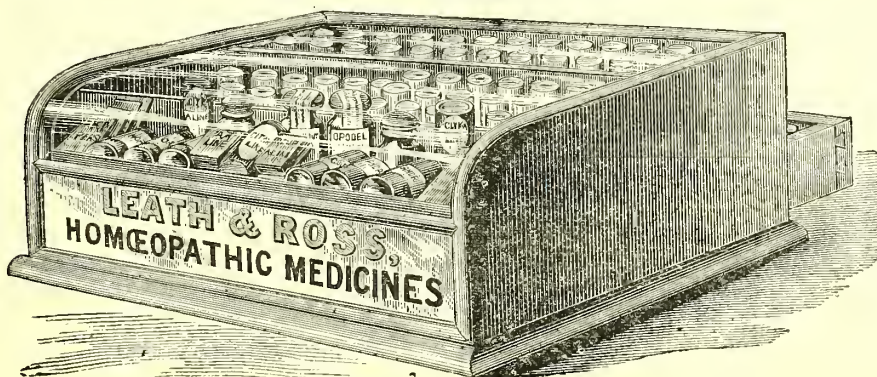
Neuraline	...	...	1/1½	Berberine	...	...	1/1½	Linimentum Auricularis	...	1/1½
Glykaline	...	...	1/1½	Chilblain Liniment	...	...	1/1½	Bryonia Liniment	...	1/1½
Phospho-muriate of Quinine	1/1½			Odontagie Essence	...	...	1/1½	Corn Eradicator	...	1/1½

All the above Proprietary Articles, 9/6 per dozen.

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30 Mincing Lane, London, E.C.

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### BUSINESS WANTED.

WANTED, a Business returning not less than £500 per annum, with good house and garden. Apply to "W.," care of J. H. Adams & Co., Stoke-on-Trent.

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FORTY-FIVE ACRES OF FREEHOLD LAND, having over half a mile of frontage to the river Thames, immediately opposite Erith; advantageous for chemical works, factories, &c., being just outside the radius of the coal dues, and between the new Tilbury Docks and the Albert and other docks up the river. For Sale, in whole or part. Particulars of Mr. Samuel Knight, Architect and Surveyor, Cornhill Chambers, 63 Cornhill, City.

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FOR SALE, genuine old-established Retail and Dispensing Business on the banks of the Thames, Middlesex; returns £550; large profits; thoroughly satisfactory reason for sale; large garden, well stocked with fruit trees; healthy locality; good house with separate entrance; household furniture (nearly new) could go with business, if wished. Address, J. P., care of Messrs. Herrings & Co., Aldersgate Street.

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LIVERPOOL.—An old-established Business, in consequence of ill-health of Proprietor; Light Retail and Dentistry; price £150. Apply, "S.," Wyleys & Co., Coventry.

FOR DISPOSAL, Chemist's Business and House Business; Light Retail, Prescribing, &c.; fairly stocked; returns, 3 years, average £250; can be doubled by addition; good house (11 rooms) in thorough repair; small garden; cash price £600. Address, A. W., 2 Dorset Buildings, Salisbury Sq., E.C.

HOMŒOPATHIC Pharmacy for immediate disposal; established 1865; in the principal street of a fashionable Midland city; returns £600; cash trade; full prices; 20 well advertised and remunerative specialties; convenient house and shop well stocked and fitted; price £600. Address, "Arnica," 5 Rodney Terrace, Cheltenham.

£850, to effect a speedy sale, in consequence of illness.—A good-class Retail, Dispensing, and Prescribing Business, situated about 60 miles from London; returns over £1,100, at full prices. Address by letter only to "W. H. W.," care of Messrs. Hodgkinsons, Stead & Treacher, Whitecross Street, E.C.

£100 cash down, remainder by instalments.—A well fitted and stocked General, Retail, and Prescribing Business, in main thoroughfare of large manufacturing town, in North of England; returns £400 under manager; price £250. Address, "Yorkshire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**TO CHEMISTS AND DRUGGISTS.**—£198 only (everything); chance seldom met with; highly respectable and capital Retail Chemist and Druggist's Business (City of Worcester); main thoroughfare; through death of Principal; every enquiry courted. Full particulars, apply at once, Gilbert Baker, Shop and Business Transfer Agent, Yew Tree Villa, Droitwich Road, Worcester.

**LIVERPOOL.**—Two Family, Dispensing, and Light Retail Businesses, in late owner's hands upwards of half-a-century, for disposal in consequence of death; well fitted; commanding situations in main thoroughfares; corner shops; good house accommodation. Apply to "M." care of R. Sumner & Co., Wholesale Druggists, Liverpool.

**FOR** immediate disposal, on advantageous terms, in a market town in Suffolk, an old-established Retail Chemist's Business; well situated and rent low; returns over £1,000. For particulars and card to view apply, Messrs. Grimwade, Ridley & Co., Wholesale Druggists, Ipswich.

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**HARLES DEN**, near Willesden Junction.—To be Let, Shop in Fortune Gate Terrace with good residence; in a splendid position for a first-class Chemist; adjoining the police-station and National Bank, in best of Harlesden, N.W.; rent £80. Apply, H. Wakefield, opposite shop.

## EMPLOYERS WANTING ASSISTANTS.

**WANTED**, a trustworthy Man who thoroughly understands the making of Concentrated Soluble Essences, &c., such as those used in the manufacture of Aërated Beverages; one who has had some knowledge of the working of a mineral water manufactory preferred; state experience, age, and salary required; highest references indispensable. Apply by letter, G.M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, a competent and experienced Assistant, aged about 22 or 23, to take partial management of small Branch; Minor man preferred; indoors. Full particulars, with photo, to Crofts, Argyle Street, Birkenhead. An Apprentice or Improver also wanted.

**CHEMICAL** and Drug trade (wholesale).—Invoice Clerk wanted, knowing the above trade well; must be energetic and a quick writer. Apply by letter, stating age, experience, and salary expected, to "Beta," care of Donnison & Son, Wormwood Street.

**FOR INDIA.**—Wanted, a good business man for a large Chemist's Business; Major preferred; single; about 24. Give experiences and references by letter to "A. B. C.," care of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**QUALIFIED MANAGER**, 30 to 35, for an Indian business; 3 years' agreement; highest references required; first-class experience and good health indispensable. Apply, stating full particulars, to D 377, Messrs. Deacon's, 154 Leadenhall Street, E.C.

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**DYES, DRUGS, &c.**—An English house, established in Hamburg, having travellers regularly visiting Manufacturers, Dyers, Printers, &c., throughout Germany and Austria, wishes to take up the sole sale, or sole agency for New or Current Articles of large consumption; cash payment. Address offers to H. O., 3,943, care of Messrs. Haasenstien & Vogler, Advertising Agents, Hamburg.

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### SUMMER BEAT. HOP CHAMPAGNE.

**CHEMISTS** who would undertake to run a popular Aërated Tonic Drink on mutual terms should write to the Advertiser; no expense of carriage, the essence being bottled by arrangement with local mineral water maker; highly pleasant; much preferred to many well known. T. S. Cocking, Chemist, Sittingbourne, Kent.

## THE LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET.

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G. A. CROSS, Secretary

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6/	7/	10/9 per gross

**Panelled, Pale Green, Best Quality.**

1½ oz. & 2 oz.	3 oz. & 4 oz.	6 oz. & 8 oz.	10 oz. & 12 oz.
6/3	7/3	8/3	12/ per gross

N.B.—Not less than 6 gross assorted sizes sold at the above prices.

Equally low quotations for FLINT Bottles of all kinds.

THE NEW "QUININE" TINTED MEDICALS.

**BOTTLES MADE FOR "SPECIALITIES."**

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1 dr.	2 dr.	½ oz.	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.
2/5	2/8	2/10	3/3	3/11	4/8	£	7/ per grs.

Not less than 10 grs. assorted sizes at these prices.

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## EXCHANGE COLUMN.

**TERMS.**—Announcements are inserted in this column at the rate of one halfpenny per word, on condition that name and address are added. Name and address to be paid for. Price in figures counts as one word. If name and address are not included, one penny per word must be paid.

**DEPOSIT OF MONEY.**—In order to ensure safety we offer the following system:—The Purchaser of anything advertised in the Exchange Column may remit the amount to us. We acknowledge receipt to both parties by post-cards, and only pay the money deposited on the advice of the remitter. Whether returned to him or paid to the seller, we charge a commission of 6d. on any transaction of 3d. or less, or 1s. if above that amount.

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#### Drugs and Chemicals.

Pulv. aloes Cape. 68s.; acid benzoic, 6d.; bals. copaiba, 1s. 10d.; syr. rhus, 40s.; fresh butter, 8d. Elmhurst, Newcastle.

#### Proprietary Articles.

Three doz. Kay's eucalyptine, 6d.; 2 doz. eucalyptine, 1s.; 8 Keating's powder, 1s.; 25s. or separate. 274/15.

Thomson's tonic elixir; Thomson's invigorating pills; Crowther's restorative pills; Cartwright's restorative pills; Pott's gout pills; Marshall's head-ail; Baxter's compound quinine pills. Wilks, Burnley.

Offers wanted for following, taken out of stock.—Pills at 1s. 1½d.; 4 Gregory's, 4 Davison's, 5 Beach & Barnicott's antiscorbutic, 6 Chinese, 3 Torreu's, 1 Hardcastle's, 1 World's Family, 3 Nurse Lilly's, 3 Wesley's, 3 Locock's 1s. 1½d. wafers, 1x1s. 1½d. Virginia gum, 3x1s. 1½d. Rough on Corus, 2x2s. Du Barry's food, 2x2s. 6d. Lamplough's saline, 2x2s. 3d. Pond's extract, 1 doz. 1s. 1½d. Handyside's electric snuff, 2x1s. 1½d. Morrison's ointment, 1x1s. 1½d. Jacob Townsend's ointment, 1x1s. 1½d. Squire Knight's ointment, 1x4s. 6d. hydro-leine, 2x2s. 6d. Savory & Moore's pancreatic emulsion, 2x1s. 1½d. Roper's plasters. A. Ellis, Chemist, Skelton, R.S.O., Yorks.

#### Shop Fittings.

One-arm nickel-plated American fountain for counter use, and 6-gallon copper cylinder, good as new, 5d.; cost 12d. 10s. Sage, Frome. To be sold cheap, 10 12-gall. globes with cut stoppers, nearly new, any number can be had. Apply to Wm. Hay & Sons, Chemists' Shop Fitters, 24 & 25 Little Queen Street, Lincoln's Inn Fields, W.C.

Several upright mahogany glass show-cases, 20s. to 40s. each; 50 gross handsomely labelled stoppered rounds, 1s. each (worth double); 7-feet mahogany-topped pauellied counter, 25s.; 6 gall. pear-shaped carboy, 10s. 6d.; 2 2-gall., 5s.; 4-gall. cylindrical, 7s. 6d.; Enterprise drug mill, 12s. 6d.; finest poppy-heads, 10s. 1,000; 2 50-gall. oil-cisterns, 15s. each. Griffin, Chemist, Monument Road, Birmingham. Wanted quantity old decayed teeth.

### Educational.

To Students.—"Hints on Pill-making," a guide in the manipulation of difficult pills; post-free 7 stamps. Clifton, 13 St. Michael's Terrace, Wood Green, London.

### Literature.

*Chemist and Druggist*, 9d., vols. 4s., from 1861; *Journal*, from 1872, 2d.; *Diary* to 1880 and 1882, 2s. 3d.; all free; or offers. Squire's "Companion British Pharmacopoeia," 12th edition, 1883, 7s.; free. Williams, Chemist, Coleford, Gloucestershire.

### Formulæ.

Two bottles Allan's antifit; on offer. Ellidge, Cliechester.

Six De Jongh's oil pints; 40 assorted Judson's 6d. dyes; good and clean; what offers? low price taken to clear. Robinson, Chemist, Haworth.

Lavender water, very superior article, gives immense satisfaction, 5s.; cherry tooth paste; arcea nut tooth paste; emollient lotion for hands and face; cleansing hair wash; stimulating hair wash; all splendid preparations and pay well; 1s. each. 276/3.

Reliable Recipes, wanted daily, all guaranteed genuine, as supplied to over 1,000 chemists. "Glycerine Cream," most elegant preparation for roughness of skin, invaluable at seaside, certain sale; "Entirely New Remedy for Toothache," gives instant ease, not injurious to other teeth; "Nigerine," jet-black, waterproof patent blacking, cheaper, sweeter, and better than Nubian; "Digestive Relish," best and cheapest sauce in creation, from 3s. gall.; "Lupuline Bitters," equals American in every respect, one-third price; "Bismuth and Steel Pills," for chronic dyspepsia, strengthen the stomach and assist digestion; "Pil. Cubepaibas," for venereal diseases in either sex, resemble B 41 Pills at one-sixth cost; "Herb Ale Ingredients," "Bark Beer Ingredients," 6d. packets make 2 gallons excellent drink, bright, sparkling, appetising, and digestive; "Milk Fever Drink (for Cows)," been in use half a century on large farms with gratifying success; "Vermin-killer," warranted equal to best advertised, costs one quarter. Recipes 1s. 1d. each, six for 5s., post free, with full instructions for making and all particulars. Terms, satisfaction; all communications strictly confidential. T. Brooks, Chemist, Louth Lines. Send for detailed list, free.

Gonorrhoea, syphilis, gleet, and venereal taint, set of eight practical recipes, with full directions for use, and distinguishing the various phases of these diseases, following which will entirely prevent that confounding of the symptoms of these disorders which so frequently occurs in counter prescribing; 3s. 6d. the set. Set veterinary receipts, 12, 3s. 6d.; superior perfume, miscible chlorodyne chemical food, costs 3½d. pound; hair stimulant, entirely new, glycerine, cucumber, and houseleek, for the skin, 1s. each, three 2s. Arthur Johnson, 64 Furness Hill, Sheffield.

### Miscellaneous.

Enterprise drug mill and tincture press, quite new, 10s. 276/3.

Two pairs clever landscape sketches, in oil, mounted, only 12s. lot; genuine bargain. Jones, 127 Gosford Street, Coventry.

What offers? 4 vols. "Cyclopadia of Practical Medicine," 1833; 6 yds. emp. plumbi on calico; 2 lbs. rad. valerian. Dobson, Greenhill Terrace, Halifax.

Glass bottles.—About 20 gross 8-oz. round-shouldered vials, amber glass, 7s. per gross; 6 gross 14-oz., white glass, 11s., best; and several other lines equally cheap. Hearn, Riddell, Kingsland Road, London.

### WANTED.

*Chemist and Druggist* for August and October, 1885. Dutton, Chemist, Bolton.

One copy of September, 1885, full price given for same. 50/50.

Bottles for dispensing screen, for powders, tinctures, &c. Park, Mutley, Plymouth.

"Gray's" Supplement, by Redwood. Send price to T. A. Wedge, Wolverhampton.

Two 10 or 12 gall. carboys; one 8-gall. four 2-gall. F., 18 London Square, Cardiff.

Directories for Lancashire and Wales; state date and price. Entwistle, 39 Shaw Street, Liverpool.

### Address Wanted.

Mr. S. Smith, chemist's locum tenens; present address. Care of Messrs. A. & E. Ballard, Chemists, Lechlade, Gloucester.



ESTABLISHED 1842.

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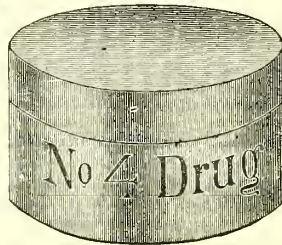
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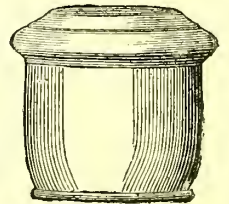
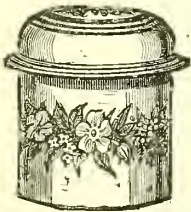
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## J. ROGERS & CO., MEDICAL BOX TURNERS,

1, 2, 3, & 47 CARTER STREET, WALWORTH, LONDON,

Turners of every description of Tooth Powder, Plate Powder, Pill and Puff Boxes, used by Chemists, Perfumers, &c.  
All Boxes of our make are finely finished. Patentees and Manufacturers of the

# SILICATED GREASE PROOF BOXES

These Boxes are turned out of Willow and Silicated inside, rendering them quite grease proof, and will be found very convenient to send by Post. They are very light, being one-sixth the weight of covered pots. They are not breakable. The lids fit quite air-tight. They will stand in any climate. They are cheap.

## SPECIAL NOTICE.

Our Boxes being made of White English Willow will not injure the most delicate preparations, and will be found quite free from the objectionable oily smell of some Boxes now being sold.

BEFORE ORDERING TURNED WOOD BOXES PLEASE SEE OUR SAMPLES AND PRICES.

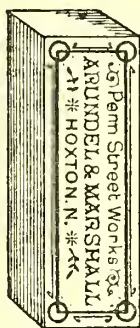
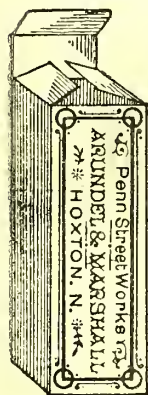


# FOLDING CARDBOARD BOXES.

## FOLDING CARDBOARD BOXES OF ALL SIZES AND VARIOUS FASTENINGS,

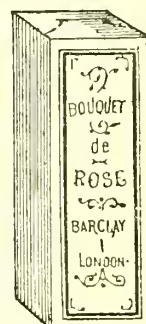
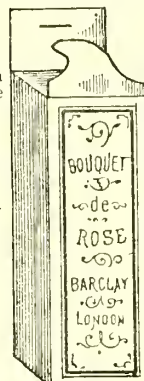
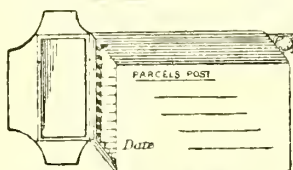
SPECIALLY SUITABLE FOR

PACKING BOTTLES, MEDICINES, SCENTS, LIQUEURS, WINES, SPIRITS, CONFECTIONERY, FANCY BISCUITS, TEA, FLOUR, TOBACCO, DRY SALTS, PROPRIETARY ARTICLES, &c.



Regular and various sizes of 2, 3, 4, 6, 8, 12, 16-oz., 1-lb., 1-lb., 1-lb., &c., in stock. As these cases are packed and stored FLAT, and so occupy little space, they are largely used by Shippers. ECONOMY OF SPACE IN STORING.

LINEN COVERED FOLDING BOXES,  
EXTRA STRONG.



## PARCELS POST BOXES.

Perfectly secure, Bottle being protected by inner wrapping of Patent Corrugated Card Board. Regular Sizes in stock; also with Divisions. Any Sizes or Shapes made.

MANUFACTURERS OF PLAIN AND FANCY BOXES OF ALL DESCRIPTIONS.

SAMPLES AND ESTIMATES FURNISHED. SEE PRICE LISTS. TO BE HAD OF ALL DEALERS.

**ARUNDEL & MARSHALL, PENN STREET WORKS, HOXTON, LONDON, N.**

(Telephone Exchange No. 220; also Telephone Office, No. 27 Falcon Square.)

## B. NOAKES & CO.,

MANUFACTURERS OF

**Metallic Casks, Drums, & Kegs**

ENAMELLED, PLAIN, AND DECORATED

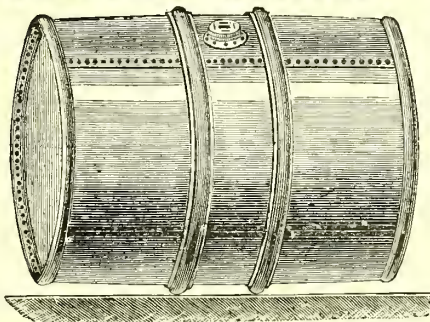
**TIN CANISTERS AND BOXES,**

FOR PACKING CHEMISTS' AND DRUGGISTS' SUNDRIES.

ENAMELLED SHOW CARDS.

IRON BARRELS,  
CAPACITY 40 TO 120 GALLONS  
AS PER ILLUSTRATION.

Cable and Telegraphic Address—  
"NOAKES LONDON."



These large Iron Casks, similar to sketch, can be handled with equal facility to wooden barrels, and, owing to their strength and durability, can be used over and over again for an indefinite period. They are perfectly liquid tight, being tested at a very high air pressure, and, unlike wood, do not absorb any of the contents. They are all fitted with interchangeable screw bungs, and can also be fitted with screw plug in head, for draw-off tap.

They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, "Black Iron," "Lead Coated," and "Tinned."

PRICE LIST ON APPLICATION.

Offices and Works: 142 SPA ROAD, BERMONDSEY, LONDON, S.E.

## AUSTIN & CO.,

PATENTEES & MANUFACTURERS OF ROUND CARDBOARD AND OTHER SHAPED BOXES,  
BRITISH AND FOREIGN,

For POSTAL and general purposes; also PATENT BARREL PACKAGES with Metal ends for dry goods.  
Inventors of the "NOVEL" METAL PERFUME SPRINKLERS.

Office & Warehouse—8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works, Mount Pleasant, Gray's Inn Road, London, and Ring Factory, Clonakilty, County Cork.

"The WANT of the PAST, the RAGE of the PRESENT, the BOX of the FUTURE."

## THE UNIQUE FOLDING BOX (Patent),

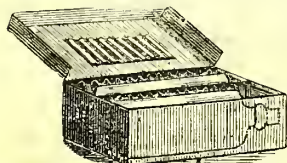
For the SAFE TRANSIT of Bottles, Fragile Articles, Game, Butter, Eggs, Cut Flowers, &c., per post and rail.

Patentee and Sole Manufacturer, **THOS. P. BETHELL,** Chicago Buildings, 64 Stanley Street, Whitechapel, **LIVERPOOL.**

Prize Medal, International Inventions Exhibition, London, 1885.

Also Specialities for Druggists and Drygallers. Seidlitz Boxes, Baking and Condition Powder Cases and Packages.

SATISFACTORY REFERENCE REQUIRED WITH ORDER.



BOX FOR 2 BOTTLES, OPEN.



# WHY SELL OBSOLETE GOODS ?

The old styles of Filters were very good in their time, but the discovery of JUDSON'S Filtering Medium, to take the place of the "WORSE THAN USELESS" Charcoal, has entirely put them out of the question for Domestic use.

## JUDSON'S FILTERS AND FILTERING MEDIUM,

THE ONLY Filtering Medium that really Purifies Water, removing Impurities both in **SOLUTION** and Suspension.

Judson's "Galvano-Electric" Filtering Medium is used in all their Filters, and is **WARRANTED** NOT to contain Animal Charcoal or other deleterious matters.

WRITE FOR ILLUSTRATED CATALOGUE.

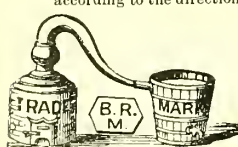
DANIEL JUDSON & SON, LIM., SOUTHWARK ST., LONDON, S.E.

Introduced 1855.]

### ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.]

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.



Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Foeniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent., 4/ lb.
" Anisi " 4/ "	" Cassia " 4/ "	" Menth. Pip. " 4/ "	" Rosæ " 8/6 "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" Ang. " 6/ "	" Rosæ Virgin " 10/6 "
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" Virid. " 4/ "	

The above are put up in Bottles of 1 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practice."

Wholesale Agents: HEARON & Co., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR, B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

## ROBERT GIBSON, MEDICATED LOZENGE MANUFACTURER.

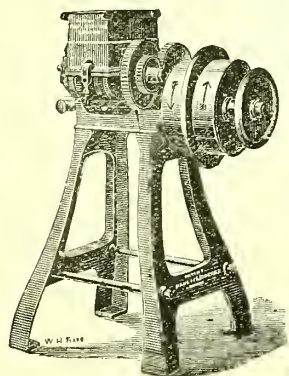
Carlton Works, Erskine Street, Hulme, MANCHESTER, and 1 Australian Avenue, LONDON, E.C.

EXPORTER OF

LOZENGES, BOILED SUGARS, & JUJUBES TO ALL PARTS OF THE WORLD.

SEE PAGE ADVERTISEMENT, JANUARY 15, 1885, No. 110.

SOLE AGENTS FOR UNITED STATES—WRIGHT & RICH, NEW YORK.



## CHEMISTS' MACHINERY.

PILL MASS KNEADING MACHINES.

PILL MAKING MACHINES.

DRUG GRINDING MACHINES.

SIFTING MACHINES.

FULL PARTICULARS OF ABOVE ON APPLICATION TO

WERNER & PFLEIDERER, 86 Upper Ground St., LONDON, S.E.  
Blackfriars Bridge,



**MUSTARD.****FINCH, RICKMAN & CO.'S****Genuine Qualities**

Are made from the finest mustard seeds only. Their compounds, as manufactured for upwards of a century, are guaranteed free from all ingredients imparting spurious heat, and are therefore equally suitable for both table and medical purposes.

**6 BROKEN WHARF, UPPER THAMES STREET.  
LONDON.**

**12½ gals. for £1, Cask free.  
SPECIAL LINES FOR CASH BUYERS!!**

**TYRER'S  
WORCESTER SAUCE,  
YORKSHIRE SAUCE,  
"BOROUGH" KETCHUP.  
BEST VALUE THAT MONEY CAN PURCHASE.**

Prices and Samples sent free of all cost by  
**PETER TYRER, The "Borough" Ketchup & Sauce Maker,  
LONDON, S.E.**

**Extract**

OF

**BEEF,**

PREPARED ON THE

**LIEBIG**

PRINCIPLE BY

**A. SANTA MARIA  
& CO.,****PAYSANDU.**Acknowledged to  
be Finestimported,  
And guaranteed  
to average  
60 per cent. of  
dry solid Extract.

*Analysis made by  
Dr. Voelcker & Sons  
of each Parcel, can be  
had on application  
to*

**HUGO BROWN  
& CO.,****41 ORMOND ST.,****LIVERPOOL,**

Who will receive orders  
for 100-lb. lots in original  
tins of 50 lbs. each).

Price 4/6 net cash per lb  
Carriage Paid.

*Cibils***FLUID BEEF EXTRACT****HIGHEST AWARDS**

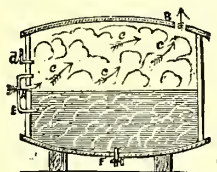
At International Exhibitions at BUENOS AYRES, 1882; AMSTERDAM and BERLIN, 1883;  
LONDON HEALTH EXHIBITION, 1884; NEW ORLEANS and ANTWERP, 1885.

This Extract embodies the latest discoveries and improvements, and is carefully made from pure Muscular Beef in South America, where the cheapness of cattle allows of unstinted use of only the best and freshest parts.

**G. ROBERTSON MURRAY, Importer for Scotland, 71 Waterloo Street, Glasgow.**

**SCHMOELE, RHODES & CO., Importers for England & Wales, 131 Wool Exchange, Coleman St., London.**

**SAMPLES GRATIS ON APPLICATION.**



**NEW METHOD OF MAKING VINEGAR,  
BY THE REVOLVING APPARATUS  
(Michaelis' Patent).**

For further particulars

See the Chemists' and Druggists' Diary, 1884, page 274,

OR APPLY TO

**PAUL ROTHERMEL,**

**105 (late of 27) LEADENHALL ST., LONDON.**

**BAILEY'S MINTON-WARE BOWL DRUG MILL.**

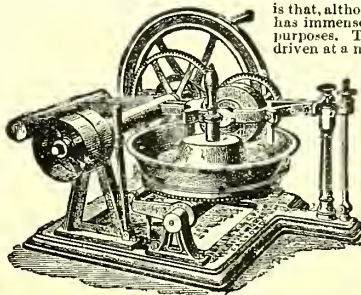
(CARR'S PATENT.) FOR HAND OR POWER.

Will reduce Crystals to an impalpable powder. The chief feature of this machine is that, although it can be turned with ease, it has immense frictional power for levigating purposes. This is caused by the runner being driven at a much greater speed than the bowl.

Diameter of Bowl, 18 inches.

Price, £11.

Lists, &c., on application.



Mr. J. DUTTON, Rock Ferry, Birkenhead, says: "The Mill you sent me answers admirably for powdering all kinds of Salts, and for many other things, such as Opium, Scammony, Soap, Almonds, Mace, &c. It also effects a great saving of time and labour in mixing various Powders, such as Tooth Powder, Lemon and Kali, &c., and proves a very useful apparatus in the shop."

**W. H. BAILEY & CO., ALBION WORKS, Salford, MANCHESTER.**

# EXTRA QUALITY GINGER BEER POWDERS, "RISING SUN" BRAND. Retail 3d. per Packet.

Superior to all others, being made from selected Jamaica Ginger, and consequently of great strength and fine aroma.

Each packet is in cardboard box, wrapped in foil, so that the powder can be kept for a lengthened period without deterioration.

They are nicely got up, and there is no name on label, merely the brand as below to prevent imitations. This enables them to be sold as seller's own article. Where a quantity is taken customer's own name can be printed

with any alteration of label required. Correspondence on this point invited.

These Powders have been in use for over 30 years, and none other sell so freely, are such good value for money, or give such universal satisfaction, whilst the wholesale price will compare favourably with other makes.

A large trade can be done by selling to small shopkeepers, who will readily pay 1/9 to 2/3 dozen for them. Packed in outer boxes of 3 dozen each.

**PRICE 16/- GROSS NETT. ONE GROSS CARRIAGE PAID.**

SPECIAL WHOLESALE QUOTATIONS FOR 5 GROSS AND UPWARDS.

PROPRIETORS:

**W. KEMP & SON, HORNCASTLE.**

London Agents—MESSRS. BARCLAY & SONS,

Who hold Stock, and supply at above price in London. N.B.—Specially adapted for export.

FACSIMILE OF LABEL.

Export Solewholesale's Hall. <b>3d.</b>	<p align="center"><b>EXTRA QUALITY.</b></p> <p align="center"><b>Ginger Beer Powder.</b></p> <p align="center"><b>"Rising Sun" Brand.</b></p> <p>Prepared from selected root of the Finest Jamaica Ginger. This packet will make two gallons very superior Sparkling Ginger Beer, with a full delicious flavour. Full directions inside.</p> <p align="center"><b>Price 3d. per packet.</b></p> 	<b>3d.</b> This Label Copyright.
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## SOAP AND OTHER BOXES,

Also Soft Wood Staves and Cask Heads,

FOR THE TRADE.

Imported from Norway, ready for nailing together, by

**BANKS & RATCLIFFE, 616 Exchange Buildings, Liverpool.**

PRICES ON APPLICATION.

By Special Appointment to

H.R.H. the Duke of Connaught and the Royal Family



## BOURNE WATERS.

THE PUREST IN ENGLAND.

## R. M. MILLS & CO.,

BOURNE, LINCOLNSHIRE,

MANUFACTURERS OF

SODA, POTASH, LITHIA, AND SELTZER WATERS,

LEMONADE, AND AROMATIC GINGER ALE.

4-dozen and 6-dozen Cases Carriage Paid.

Prices and Pamphlet on application. Agents appointed.

## CHUBB'S Best SEIDLITZ POWDERS

—Full Weight—Loose, at 7s. per gross; in lift-off boxes, 7s. 6d., and in hinged boxes, 8s. 6d., per dozen.

## CHUBB'S Extra Scented VIOLET POWDER

(WARRANTED PURE STARCH POWDER),

In 1d. Boxes, 6s. gross, and 2d. Boxes, 11s. gross, and in 1/4-lb. and 1/2-lb. Packets, 10d. per lb.

## CHUBB'S Pre- pared FULLER'S EARTH

In 1d. Boxes, 5s. gross, and 2d. Boxes, 9s. gross, and in 3d. and 6d. ROUND Boxes, 1s. 6d. and 2s. 6d. dozen.

SUBJECT TO 15 PER CENT. DISCOUNT FOR CASH.

May be obtained through all the Wholesale Houses, or direct from

**CHUBB & CO., 29 OLD ST., LONDON, E.C.**

SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

## WM. BUSH, SON & CO.

Estab. over 40 years.

**YORK STREET, WALWORTH, LONDON, S.E.**

IMPORTERS OF ESSENTIAL OILS.

SAMPLES AND PRICE LIST ON APPLICATION.

SOLE PROPRIETORS OF

## MARIGOLDINE,

NEW COLOUR FOR BUTTER, CHEESE, &c.

After a lengthened investigation, the Proprietors are enabled to offer this novel preparation, representing the rich colour of the Marsh Marigold, in a highly concentrated form. Being a Vegetable Extract, it will be found to impart to Butter a beautiful golden colour, free from taste, possessing its natural odour, and as pure as the herbage on which the animal feeds.

It is well known that in the Spring or Summer the rich colour of Butter is derivable from the Marsh Marigold and Ranunculus (Buttercups) of our pastures, and it has been the aim of the Proprietors to produce an article that will enable the dairyman to obtain uniformly the same results at all times of the year in the most agreeable form; and it is confidently believed that it will be found superior to every preparation hitherto sold for the purpose. Its perfect compatibility with oil and grease of every description (not watery compounds) makes it useful for many other purposes in which it is desired to obtain a rich and delicate golden tint.

Sold by Chemists, &c., and Wholesale Houses.

W. B. Son & Co. solicit inquiries, and will be happy to furnish Samples and Prices at all times.



PRICE LISTS ON APPLICATION.



**PEARS'**  
Soap

**PEARS' SOAP**

RECOMMENDED BY  
MRS. LILLIE LANTRY  
FOR IMPROVING  
& PRESERVING  
THE COMPLEXION.

YOU DIRTY BOY!

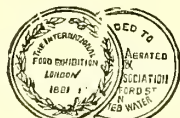
REGISTERED TRADE MARK

SWAIN

A. & F. PEARS, 38 Great Russell St., W.C.



ONLY PRIZE MEDAL,



LONDON, 1881.

# READ

THE FOLLOWING SELECTIONS FROM

## OVER 300 TESTIMONIALS

RECEIVED FROM

**MEDICAL MEN, CHEMISTS, and HOSPITALS respecting the Waters manufactured by**  
**THE CHEMISTS' AERATED & MINERAL WATERS ASSOCIATION, LTD.**

From J. THOMPSON, Esq. (Messrs. MAW, SON & THOMPSON),  
 7 to 12 Aldersgate Street, London, E.C.

Both the Soda and the Potash Water are in my opinion excellent.  
 Signed, J. THOMPSON.

From J. CAMERON, Esq., M.D., &c., Medical Officer of Health, Hendon, N.W.  
 Dear Sir,—Having used and examined the waters prepared by the Chemists' Aerated and Mineral Waters Company, I am of opinion that they are of pure quality, well charged with gas, and being prepared according to the formula of the British Pharmacopoeia, they contain a fixed quantity of various salts, which are useful in the treatment of disease.

I am, dear Sir, yours truly,  
 Signed, JAMES CAMERON, M.D., &c.

From A. S. THORBURN, Esq., M.D., L.R.C.S., 7 Catherine St., Strand, W.C.  
 To the Secretary.

Dear Sir,—I have used your waters for some years, and am so perfectly satisfied with the quality, purity, and aeration, that I recommend them with confidence to my patients. I think that your system of making waters up to strength as prescribed by the British Pharmacopoeia and stating that fact on bottles, &c., is an excellent one, and one that I have not noticed elsewhere. (Signed) A. S. THORBURN, M.D., L.R.C.S.

From ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN  
 Leicester Square, W.C., and Markham Square, S.W.

Dear Sir,—I have much pleasure in answering your question as to the feeling that has been expressed by the authorities of this hospital in reference to the mineral waters supplied by the Chemists' Aerated Waters Association. Allow me to state that we have now used your Association's waters for a considerable time and we have invariably found them as good as good could be; I have not once had any complaint as to them—on the contrary.

Yours truly,  
 Signed, ST. VINCENT MERCIER, Secretary.

From the NORTH LONDON CONSUMPTION HOSPITAL, Mount Vernon,  
 Hampstead.

Dear Sir,—I have much pleasure in saying that the aerated waters supplied by your Association to the North London Consumption Hospital for several years were very good in quality and purity.

Yours faithfully,  
 Signed, W. HORNIBROOK, Secretary.

CONSULTING CHEMIST TO THE ASSOCIATION,

WILLIAM FOSTER, M.A. (Camb.), F.C.S., Fellow of the Institute of Chemistry, Professor of Chemistry at the Middlesex Hospital, &c., &c.

**CHEMISTS' AERATED & MINERAL WATERS ASSOCIATION, LTD.,**  
**LONDON. BRISTOL. HARROGATE.**

# W. MEADOWCROFT,

## SOLUBLE FRUIT ESSENCES

MANUFACTURER OF HIGHLY CONCENTRATED

AND ALL OTHER REQUISITES FOR THE MANUFACTURE OF HIGH-CLASS AERATED WATERS.

Agent for Galloway's Soda Water Machinery and Hassall's Phospho-Citric Acid.  
**WRITE FOR PRICE LIST.**

**W. MEADOWCROFT, Old Bank Street, BLACKBURN, LANCASHIRE.**

## VALLET'S PATENT IMPROVED STOPPERED BOTTLES,

For Mineral Waters and Gaseous Liquids,  
 Are now used by upwards of 1,000 Soda Water Manufacturers in the United Kingdom.

SAMPLES AND PRICES OF BOTTLES AND STOPPERS ON APPLICATION.

Fig. 9. Boxwood Bottle Openers, polished .. .. 8/6 per gross.  
 Ditto, fitted with indiarubber inside .. .. 10/6 "

Fig. 10. New Bottle Opener, fitted with rubber .. .. 6/ "

**ROYALTY FREE.**



Fig. 3.

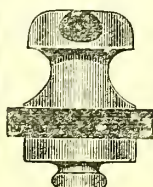


Fig. 6.

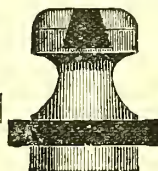


Fig. 1.

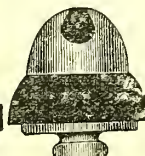


Fig. 7.

It will be seen by reference to figs. 6 and 7 that I now form a button or nut under the base of my Stopper for the purpose of easily extracting same from the Bottle without spoiling or removing the indiarubber from the body of the Stopper. This is readily accomplished by the use of a suitable tool made to fit on the nut; the Stopper being grasped in withdrawn from the bottle in a second, without injury to the Stopper.

Therefore, it will be a great saving to Mineral Water Manufacturers, as by the old way of extracting the Stoppers from the Bottle, when necessary, very often the indiarubber is spoiled, and the time it takes by this slow process is worth more than the Bottle itself; so that in many instances Bottles with spoiled or dirty Stoppers are put aside as worthless stock.

Figs. 1 and 6 Stoppers, when invoiced without Bottles, are ready fitted with the rubber washer on, and are easily inserted into the Bottle by the simple pressure of the thumb, the washer at the same time folding in the hollow part of the stem, when passing into the Bottle. They are the only Stoppers which require no tool to fit into the Bottle; and when a Bottle breaks, which seldom occurs, the Stoppers are always fitted with washer and ready to be inserted in a new Bottle. Therefore they are the most durable and inexpensive Stoppers in the Trade.

Sample and Particulars sent on application to

**L. VALLET, 49 EVERTON RD., LIVERPOOL.**



# JEWSBURY & BROWN'S (MANCHESTER) SPARKLING TABLE WATERS, UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.

SELTZER WATER.

POTASH WATER.

LITHIA WATER.

SIMPLE  
AERATED WATER.

LEMONADE.

GINGER ALE.

QUININE TONIC.

GINGER BEER.

HOREHOUND BEER.

## EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."

FRANCIS JONES, F.R.S.E., F.C.S.

"On the whole, I have no hesitation in stating that your Aerated Waters are of the highest standard of purity which is practically attainable."

LOUIS SIEBOLD, F.I.C., F.C.S.

"The Lemonade is, for flavour and general excellence, superior to any similar compound which I have examined, and contains no acid but *Caric Acid*."

"I took a sample of the water used in your manufactory, in the preparation of the Aerated Waters, and found it, as was the case with the completed compounds, entirely free from lead, copper, or any injurious matter whatever."

C. ESTCOURT, F.C.S., F.C.I.

J. & B.'s Syphons are mounted with PURE BLOCK TIN, thus ensuring absolute immunity from dangerous metallic contamination.

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.



1878.



1873.

## EUGENE GERAUT & CO.,

PATENTEES AND MANUFACTURERS OF

SODA WATER MACHINES, FILLING MACHINES,

SYPHONS, SELTZOGES, &c., &c.,

139 & 141 FARRINGTON ROAD, LONDON, E.C.,

Late 1 and 2 CORPORATION BUILDINGS.



### NEW PATENT LEVER SELTZOGES,

For immediate production of Eau de Vichy, Soda Water, Sparkling Lemonade, and Aerated Waters.

First introduced by EUGENE GERAUT & Co. in 1853.

#### WHOLESALE PRICES

as follows:—

3-pint Size, Wire, 10/0; Cane, 10/6

5-pint " " 15/0; " 15/9

8-pint " " 25/0; " 26/6

Silver-plated Tops, 5/ extra.

3-pint Size, strongly silver-plated, richly decorated

Porcelain stands ... each 30/0

5-pint ditto ... " 35/0

8-pint ditto ... " 45/0

#### POWDERS FOR THE ABOVE.

12 Charges 10 Charges

3-pint size, in Per doz. Per doz.

handsome la- Boxes. Boxes.

belled boxes 21/0 18/6

5-pint ditto ... 30/0 26/0

8-pint ditto ... 51/0 44/6

#### LIBERAL DISCOUNT FOR QUANTITIES.

Our well-known Seltzogenes are improved yearly, and have already stood a public test of upwards of Twenty Years, and are acknowledged as THE VERY BEST.

### SYPHONS.

Clear or Coloured Glass (White, Blue, Green, or Yellow), pure ENGLISH BLOCK TIN TOPS, with Piston or Cap.

22/6

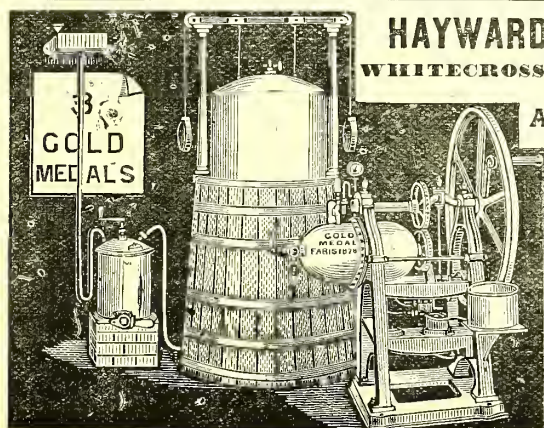
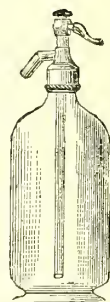
per dozen, for quantities of not less than one gross.

Packing in Cask, 5/ per gross.

The Name marked on the metals free of charge for quantities of not less than one gross.

The Name engraved with Trade Mark, from 1/6 to 2/6 per dozen extra.

Illustrated Catalogue on application.



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WHITECROSS STREET, LONDON

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MACHINERY,

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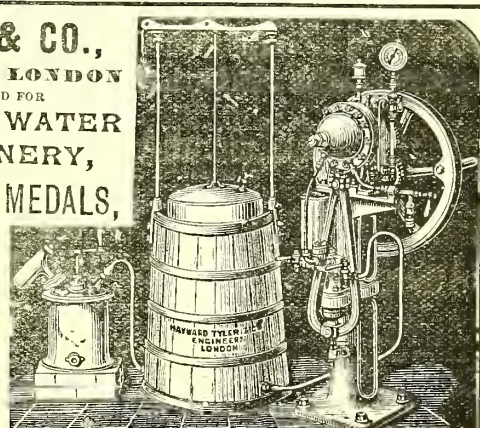
1878.

LONDON,

1884.

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SPECIALLY PREPARED FOR THE DISPENSARY.

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WESTON-SUPER-MARE.

HIGHLY COMMENDED BY THE "LANCET."

*Colonial and Foreign orders promptly executed.*

## BINGLEY'S GINGER ALE

DR. ANDREW WILSON, F.R.S.E., Editor of "Health,"

*In a Letter dated January 20th, 1886, says:—*

"BINGLEY'S GINGER ALE is unsurpassed for delicacy of flavour, and for its high quality. As a substitute for Alcohol, taken along with food, and as a temperance drink, it has in my opinion no rival."

MANUFACTURED BY

**JOHN BINGLEY, ANALYTICAL CHEMIST, NORTHAMPTON.**

Specially Prepared for Exportation.

Correspondence Invited.

## THE BRITISH SYPHON CO.'S (EUGSTER & KOERTGEN, Proprietors) SELTZOGENES AND SYPHONS

ARE THE MOST

**PERFECT**

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**RELIABLE**

IN THE MARKET.

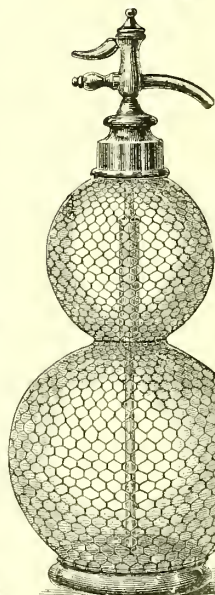
*The working of every machine guaranteed.*



Syphons of all kinds. First quality only.

**SEVEN PRIZE MEDALS.**

Prices and all particulars on application.



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46, MINORIES, LONDON, E.C.

New York  
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# SODA WATER MACHINERY

AND ALL ACCESSORIES FOR THE TRADE

## BRATBY & HINCHLIFFE

HEAD OFFICE  
SANDFORDS' ANCOATS, MANCHESTER

BOXES BOTTLES, MACHINERY, ESSENCES.  
*Catalogues, Circulars, Testimonials Post Free*

"ABSOLUTELY PURE."



REGISTERED.

## ELLIS'S RUTHIN WATERS.

ESTABLISHED 1825.

Soda, Potass, Seltzer, Lemonade, Aromatic Ginger Ale.  
For Gout: Lithia Water, and Lithia and Potass Water.

**ASK FOR ELLIS'S.**

SOLD EVERYWHERE.

**SOLE ADDRESS—R. ELLIS & SON, RUTHIN, NORTH WALES.**

London Agents: W. BEST & SONS, Henrietta Street, Cavendish Square.

ANNUAL SUBSCRIPTION, POST FREE, 6s. SAMPLE COPY, 1s.

## THE MINERAL WATER TRADE REVIEW.

ESTABLISHED 1873.

*The Pioneer Journal and Representative Organ of the Mineral and Aerated Water Trades.*

PUBLISHED ON THE 18TH OF EACH MONTH.

**J. GILBERT SMITH, 143 Queen Victoria St., LONDON.**

## LA BOURBOULE,

AN EMINENTLY RESTORATIVE MINERAL WATER.

Contains Chloride of Soda, Bicarbonates, Arsenics (28 millig. of arseniate of soda per litre).

Dose: Half a glass to three glasses per day before or during meals.

A Regenerator for Weakly Children, and for Debility in Adults; also in Anæmia, Fatty Degeneration, Affections of the Skin and Respiratory Organs, and Intermittent Fevers. Employed as a drink and in gargles for Bronchitis and Sore Throat, and as a drink and lotion in Ringworm, Chaps, and Redness of the Skin.

Anglican Divine service on Sundays.

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# SUPPLEMENT TO "THE CHEMIST AND DRUGGIST."

SATURDAY, JUNE 12, 1886.

i

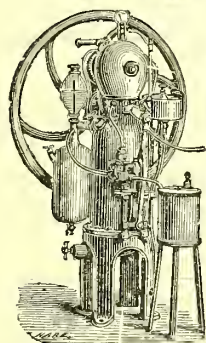
## H. FAVARGER.

GOLD MEDAL]

MONDOLLOT'S PATENT

[PARIS, 1878.]

### SODA WATER MACHINERY.



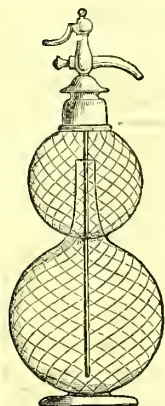
The "MEDIUM" is guaranteed to make extra sharp Soda Water, and the finest Lemonade, Ginger Beer, Ginger Ale, &c.  
 The "MEDIUM" requires no skilled labour, and can be worked by hand or steam power.  
 The "MEDIUM" saves 50 per cent. of materials over any other hand machine, and requires less power.  
 The "MEDIUM" will last for years without repairs beyond the renewal of washers.  
 The "MEDIUM" requires no gasometer, and occupies but a quarter of the room of an ordinary machine.  
 The "MEDIUM" is automatic in all its work, and merely requires the wheel to be turned.  
 The "MEDIUM" is of the finest workmanship, and is in use all over the world.

*Apply for illustrated Catalogue to*

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REDUCED PRICES.

### FEVRE'S SELTZOGENES.



	2 PINT.	3 PINT.	5 PINT.	8 PINT.
Caned, each ... ..	8/9	10/2	15/3	26/
Wired, each ... ..	8/3	9/9	14/6	24/6
£2 worth or more, 5 per cent. discount.				

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

*Temporary Address during Rebuilding of Premises—9 MOOR LANE, E.C.*

*Telegraphic Address—"MOAB LONDON."*

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## THE ZOEDONE COMPANY'S WREXHAM WATERS

ARE UNSURPASSED FOR PURITY & EXCELLENCE.

"Pure, Invigorating, and possessed of valuable Dietetic Qualities."

GRANVILLE H. SHARPE, Consulting Chemist, Analytical Laboratory, Great Tower Street, London, E.C.

APPLY FOR TERMS TO

THE ZOEDONE COMPANY, Lim., 80 Coleman Street, London, E.C.

BY ROYAL LETTERS PATENT.

# HASSALL & CO.'S PHOSPHO-CITRIC ACID

TO SUPERSEDE CITRIC AND TARTARIC ACIDS FOR AERATED WATERS.

Is recommended by the most eminent Physicians in Great Britain. The Best Houses in the Trade have already adopted it. It is thoroughly beneficial, and far better suited to the requirements of the Mineral Water Trade; it is free from lead and all other minerals and cheap acids; it is fully £6 per cwt. cheaper than Citric Acid.

WE COMPETE ON QUALITY & PRICE.

THE PATENTEES CLAIM FOR IT, AMONGST

1. That there is no risk of prosecution, and consequent ruin of business, for lead contamination.
2. That it does not deteriorate by exposure, and will retain all its properties any length of time.
3. The price is only 10d. per lb. in 9 and 18 gallon casks; if in smaller quantities, 1s per lb.
4. It is now an established fact that the beverages made with this acid far excel all others in keeping properties, as there is not the fungoid growth that there is with other acids.

3-oz. Sample will be sent on receipt of postage (3 stamps), or 14 lbs. will be sent on approbation.

OTHERS, THE FOLLOWING ADVANTAGES:—

5. The Essences retain their strength to a greater degree.
6. A thoroughly clear and pure beverage is obtained, whilst a greater "body" and more fruity character is imparted.
7. Time and labour saved. Being in liquid form, requires only to be measured and added direct.
8. It is entirely free from Sulphuric, Hydrochloric, Nitric, Acetic, or other cheap Acids.
9. It does not affect the metal pipes to the same extent that Citric and Tartaric Acids do.

Extract from the "ANALYST," the medium of communication between Public Analysts, for September 1884—

CITRIC and tartaric acids have long been used for acidulating or giving to mineral waters their acid flavouring, but these acids have certain disadvantages, inasmuch as their solutions cannot be kept for any great length of time without the formation of a fungoid growth, and also the extreme difficulty of obtaining them free from lead. A solution has recently been offered to the trade called Phospho-Citric Acid, the properties of which will no doubt interest Analysts. Poisonous metals were entirely absent, and so also were free sulphuric, hydrochloric, nitric, and acetic acids. The solution was clear and colourless. The quantity of phosphoric acid in a small bottle (half-pint) will amount to '95 grain, which I found to be the case in a sample of lemonade made with the above. The flavour and appearance were quite as good as that made with the organic acids. There is no reason why this article should not be used in this highly diluted form as the acid flavouring of lemonade and other mineral waters.

JAMES NAPIER'S REPORT, July 30, 1884.

I examined samples for poisonous metals, especially arsenic, lead, and copper, but could not find the slightest trace. Free sulphuric, hydrochloric, nitric and acetic acids were also absent; indeed, no free acid exists but phosphoric and citric. From analysis and careful examination, I am of opinion that, as an article to supersede tartaric and citric acids in mineral waters, phospho-citric is in many respects superior to those acids. As is well known, it is almost an impossibility to obtain tartaric and citric acids free from lead, so that this article, having no metallic contamination, is purer than those acids. I see no reason why the use of phosphoric acid, in a highly diluted form, will not prove beneficial and be much more superior to tartaric and citric acids. As phosphoric acid is a necessary constituent of the body, whilst tartaric and citric are entirely absent, it is certainly an advantage to use it, as it supplies a very important ingredient to the system and one which is too often obtained in insufficient quantities. The lemonade was entirely free from metallic contamination and fungoid growth, had a bright appearance, was particularly clear, and had a very agreeable flavour. I have no doubt but Phospho-citric Acid will be much used, as it is well suited for its intended purpose, i.e., to supersede citric and tartaric acids in mineral waters.

JAMES NAPIER, F.C.S., F.I.C., Public Analyst, London.

Dr. HASSALL'S REPORT.

The Analytical Sanitary Institution, 54 Holborn Viaduct, E.C., London, June 25, 1884.

Having submitted to analysis a sample of Phospho-citric Acid, we find it to be entirely free from lead and other metallic impurities. Free sulphuric, hydrochloric, and acetic acids were also specially tested for, and found to be absent. The solution was clear, colourless, and, when sufficiently diluted, possessed an agreeable flavour. It is evident from the foregoing particulars that this preparation is well suited to supersede tartaric and citric acids, commonly employed in the manufacture of acidulated and aerated waters; while in its cheapness, freedom from metallic contamination, and in the circumstance that it would tend to preserve beverages made with it for a greater length of time (as there would be less tendency to the development of the fungoid growth frequently observed when the ordinary acids have been used), Phospho-citric Acid offers very considerable advantages.

ARTHUR HILL HASSALL, M.D.,

Author of "Food: its Adulterations and Methods for their Detection."

The above is also confirmed by EDWIN GODWY CLAYTON, F.C.S., &c., &c.

Professor JUSTUS VON LIEBIG,

Equally well known in England and Germany, says: Phosphoric Acid is a never-fading ingredient of all the organised structures of the animal body. The substance of muscular fibre, the fibrine of the blood, the pulmonary tissues, the liver and the kidneys contain an amount of phosphoric acid in chemical combination. The bones of the vertebrata contain more than half their weight of phosphates of lime and magnesia. The substance of the brain and the nerves contain phosphoric acid. The blood contains under all circumstances a certain amount of phosphoric acid.

Dr. WILLIAM B. CARPENTER

Says: Phosphorus exists in combination with albuminoid compounds, and in all animal substances composed of these. The proportions of phosphorus in the brain is considerable, being from 8 to 18 parts in 1,000 of the whole mass, or from 1-20th to 1-30th of the whole solid matter. It seems to be unusually deficient in the brains of idiots.

123 Lonsdale Street West, Melbourne, June 11, 1885.

Gentlemen,—We have tried the Phospho-citric Acid and have much pleasure in pronouncing it a decided success. It is free from any objectionable flavour or taint, and being in liquid form is a great boon, as the time and trouble in weighing and dissolving the other acids is a consideration in the busy time. We consider all aerated-water makers will find it greatly to their advantage to adopt the use of it.—Yours sincerely, R. O'DONNELL & CO.

46 Myddelton Street, London, E.C., August 20, 1885.

Gentlemen,—After fifteen months' continuous use of your acid we have much pleasure in testifying to its excellence. We find it possesses all the properties required by us for our trade, and is at the same time a great saving in time and expense.—Yours respectfully, R. MAYER & SONS.

2, 3, and 4 Rose Lane, London, August 18, 1885.

Gentlemen,—We have now been using your Phospho-citric Acid over fourteen months, and have much pleasure in stating that we like it very much. It is certainly easier to work with than citric and much cheaper. We can find no fault whatever with it.—Yours truly, T. WATTS.

Catherine Street, Strand, May 7, 1885.

Gentlemen,—We have much pleasure in stating we have used your Phospho-citric Acid for several months, and find it a great improvement to the flavour of the lemonade, &c., also about 70s. per cwt. less than citric acid crystals. It is also a great boon in the saving of time, as it is always ready for instant use.—We are, yours respectfully, W. R. LISTER & CLEMOW.

Newcastle-on-Tyne, August 28, 1885.

Gentlemen,—I have now been using your Phospho-citric Acid for a considerable time, and have much pleasure in saying that it is the best and most economical article for the purpose I have met with. In my opinion it is far superior to the ordinary acids, producing a better beverage, and far easier to manipulate.—Yours truly, W. GLENDINNING.

Cathay, Bristol, August 12, 1885.

Gentlemen,—I have used your Phospho-citric Acid daily for the last ten months with a rapidly-increasing business, to the satisfaction of my customers and profit to myself, being only about half the cost of the other acids and ready for instant use; it gives me every satisfaction.—Yours respectfully, C. E. BEAVIS.

3 Sussex Street, Blyth, November 12, 1884.

Gentlemen,—I am happy to inform you that I have tried your Phospho-citric Acid, and I find it quite as good as you represent it to be. It saves labour, and is little above half the price of citric and tartaric acids. The cask I ordered last week is to hand.—I remain, yours respectfully, THOMAS FORSTER.

SCORES OF TESTIMONIALS MAY BE SEEN AT ANY TIME.

Sole Agents for Australia and New Zealand—

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HERBERT RAYMOND, 26 Exchange, Pitt St., SYDNEY.

HASSALL & CO., No. 1 WAREHOUSE, GT. NORTHERN GOODS DEPOT, LONDON.  
KING'S CROSS,



**W. J. BUSH & CO.,**

MANUFACTURING CHEMISTS,

DISTILLERS AND IMPORTERS OF

**ESSENTIAL OILS AND FRUIT ESSENCES,**

INVENTORS OF

**SOLUBLE ESSENCES FOR AERATED WATER  
AND CORDIAL MANUFACTURERS.****FRENCH CREAM GUM EXTRACT,**

PROTECTED BY ROYAL LETTERS PATENT,

*For producing a head of Creamy Richness upon all kinds of Syrups, Aerated Waters, Beers, Ales, Cider, Champagne, &c., 2s. 6d. per pound.*

W. J. BUSH &amp; CO. regret having to Caution the Trade against spurious imitations of this article, most of which are mere rubbish.

**W. J. BUSH & CO.'S  
ENGLISH DRAWN ESSENTIAL OILS.**

OL. AMYGD. ESSENT. ANG.

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Sine Acid. Prussic.

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OL. CARUI ANG.

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OL. COPAIBÆ ANG.

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OL. MENTH. PIP. MITCH.  
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OL. LIMONIS

OL. BERGAMOT

} W. J. BUSH &amp; CO.'S SPECIALITY.

**ARTILLERY LANE, BISHOPSGATE, LONDON.**

*In the High Court of Justice, London, June 4th, 1886.  
Before Mr. Justice North.*

---

THE HOP BITTERS Co. v. H. PRATT, CHEMIST, YORK.

THE HOP BITTERS Co. v. W. PLATT, CHEMIST, MATLOCK BATH.

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*In these Actions the Plaintiffs, who carry on business at 41 Farringdon Road, London, and known as the Hop Bitters Co., sought to restrain the Defendants from infringing their trade-mark of "Hop Bitters." Mr. Aston, Q.C., and Mr. Theodore Dodd (instructed by Messrs. Seeley & Son) appeared for the Plaintiffs. The former, in opening the case, said this application was made on behalf of the Hop Bitters Co. in respect to their well-known Hop Bitters, and he now moved for an Injunction "to restrain the Defendants" from infringing the Plaintiffs' trade-mark and vending imitations until the trial of these Actions. Mr. Bardswell, on behalf of the Defendants, elected that the motions be treated as the trial of the Actions.*

*The Judge immediately granted the Hop Bitters Co. a perpetual Injunction against both Defendants, and that they be condemned to pay the whole of the costs.*

**CAUTION.**—*We direct attention to the Actions reported above, and have fully determined to ferret out all infringements of our rights and (without further notice) treat them in a like manner.*

*If any person vending an imitation of "Hop Bitters" is in doubt as to whether he is infringing the trade mark and rights of the Hop Bitters Co., he has only to ask himself whether he ever put up and sold any form of so-called Hop Bitters of his own manufacture till we had created a demand and popularised Hop Bitters at an enormous expenditure of money.*

*We know what the answer must be to this question. We shall protect our rights to the fullest extent, and prosecute every person, be they whom they may, who attempts to trade on the reputation and popularity of Hop Bitters, by putting up imitations of any description whatever.*

HOP BITTERS CO.

ROCHESTER, N.Y., U.S.A.  
LONDON, ENGLAND.  
TORONTO, CANADA.

ANTWERP, BELGIUM.  
PARIS, FRANCE.  
MELBOURNE, AUSTRALIA.



'Telephone Number,  
1852.

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**CHEMDRUG**  
**LONDON.**

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Please note that to satisfy Post Office requirements the Advertisements are paged twice—once in Arabic, once in Roman numerals.

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Henry's Great Indian Remedies xvi BRAMWELL & SON Cocaïne Gargle Soda and Epsom Salts 26 BRATBY & HINCHLIFFE ..... Soda Water Plant 14 BRITISH SYPHON CO. .... Syphons, Gasogenes 14 BROOK, BOND & CO. .... Teas 24 BROWN, HUGO & CO. .... Extract of Beef 9 BTCK, F. .... Dentistry xviii BURROUGHS, WELLCOME & CO. Drug Mill, Tincture Press (Enterprise) ix BUSBY, W. J., & CO. Essential Oils, Soluble Essences, French Cream iii BUSH, W., SON, & CO. .... Marigoldine, Chemicals 10 BUSINESSSES FOR DISPOSAL ..... 2 BUTLER, McCULLOCH & CO. Herbalists, Leeches, Waters xvii CADBURY'S BROS. .... Cocoa Fences COVER CENTRAL SCHOOL OF CHEMISTRY AND PHARMACY ..... School 5 CHEMISTS' AERATED WATER COMPANY Aerated Waters 12 CHESEBROUGH MANUFACTURING CO. White Vaccine 12 CHUBB, J. C., & CO. Sedlitz, Violet, Fuller's Earth Powders 10 CHURCHILL, J. & A. "J Physician's Pharmacopoeia" 5 CIBILES & CO. .... Fluid Beef Extract 9 COLEMAN & CO. .... Liebig's Extract of Meat and Malt Wine 25 CORNER, R. .... Deconchere Oils and Embrications 16 CROUCH, F. B. .... Dominica Wafers xiv DARTON, F., & CO. Spectacles, Clinical Thermometers viii DAVIS, M., & CO. .... Filters, Flytrap, Vials, &c. 26 DINNEFORD & CO. .... Fluid Magnesia xli DITTMAR'S, W. .... Analytical Chemistry 5 ELLIS, R., & SON ..... Ruthin Aerated Waters 14 ESTES, E. B., & SONS ..... Turned Wood Boxes 6 EXCHANGE COLUMN ..... 4 FARMILLOE, GEO., & SON ..... Glazed Zinc 20 FAYARGER ..... Soda Water Machinery 1 FENNINGS, ALFRED Children's Powders COVER FENCIL, RICKMAN & CO. .... Mustard 9 FINK, FRED., & CO. .... Glycerine, Gums, &c. 26 FOLLOWS & FATE ..... Druggists' Machinery of all kinds 27 FORD, SHAPLAND & CO. Chemists' Fly Papers and Handbills 20 GEORGE & WELCH ..... Dandelion Coffee, &c. 23 GERAUT, EUGENE, & CO. Machin ry, Syphons, &c. 13 GIBSON, R. .... Lozenges 8 GILLOTT, J. .... Pens 20 GOODALL, BACKHOUSE & CO. Yorkshire British, &c. 23 GOVERNMENT (THE) SANTARY CO. Disinfectant 27 GRINDLEY & CO. .... Petroleum Jelly 26 GT. TOWER ST. TEA CO. Celebrated London Teas 24 HALLER & CO. .... Lanoline x HAMILTON & CO. .... Carbolica 16 HARRIS & CO. .... Bottles xviii HARRIS, PHILLIP & CO. .... Grade of Zinc xi HARSTON & CO. .... Ginger Ale 26 HASSALL & CO. .... Phospho-Citric Acid ii HAYWARD TYLER & CO. .... Steam Engine 13 HEARN, RIDDELL & CO. .... Bottles xviii HEARON, SQUIRE & FRANCIS ..... Furniture Text 564 HERTZ & COLLINGWOOD ..... Cod Liver Oil xvi HINDE, BROS. .... The "Very" Brush 17 HOCKIN, WILSON & CO. Menthol Cones, Toothache Pencils, &c. 15 HODGE & CO. .... Impregnated Truss xviii HOPE BITTERS ..... Caution and Guarantee ix, xvii HORN & SON ..... Patent and Trade Mark Agents 26 HOUGHTON & CO. .... Photographic 20 HOWARDS & SONS Quinine and Pharmaceutical Chemicals xiii HUNYADI JANOS ..... Waters 4 INGRAM & ROYLE Natural Mineral Waters...COVER JAMES, LIEUT. .... Horse Blister 16 JAMES, R. J. .... Veterinary 16 JENSEN'S ..... Cod Liver Oil, "Leberg Brand" xvi JEWSEURY & BROWN ..... 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## CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

### AERATED AND MINERAL WTS AND PLANT

[See SYPHONS and ESSENCES.]

Apollinaris (Hunsyadi, Friedrichshall, and Apollinaris)  
Barnett and Foster  
Bratby and Hinchcliffe  
British Syphon Co.  
Bush, W. J., & Co. (Foam Producer, &c.)  
Chemists' Aerated Waters Association  
Ellis (Ruthin)  
Favarger, H.  
Geraut and Co.  
Gueret Freres  
Harston & Co.  
Hassall and Co. (Citric Acid, Phospho)

### Aerated & Mineral Wts & Plant—cont.

Hooper and Co. (Brighton Seltzer)  
Ingram and Royle (Mineral and Vichy)  
Jewsbury and Brown  
La Bourboule  
Meadowcroft, W.  
Mills and Co. (Bourne)  
Schacht, W., and Co. (Kronenquelle)  
Schweppé and Co.  
Stevenson and Howell  
Taylor, T. and F. J.  
Tyler, Hayward, and Co.  
Vallet, L. (Bottles)  
Younger and Ridley (Temperature Wines)  
Zoedone Co

### ACETIC ACID Dunn and Co. Lindsey, O. R., and Co.

### ALKALOIDS Howards and Sons (Cinchona) Smith, J. and H.

### ALOIN Smith, T. and H., and Co.

### AMMONIA May and Baker

### APPARATUS Cetti, E. (Meteorological) Follows and Bate, Lim. May, Roberts & Co. (Water-bath) Morgan Crucible Co. Orme (Scientific) Pat. Plumbago C. Co. Rothermel, Paul (Vinegar) Wolters, Otto (Balances)

### AGENCIES ABROAD

Campbell, Nell S. (Colombo)  
Cocking (Japan)  
Davis, A. (delphia)  
Eisner and Mendelson (Philadelphia)  
Evans, Sons and Mason (Canada)  
Felton (Melbourne)  
Fougere (New York)  
Hormusjee Ruttonjee (Bombay)  
Kempthorne (N.W. Zealand)  
Lennon (Port Elizabeth)  
Mayhew, E. (Wstn. Australia)  
Phillips and Co. (Bombay)  
Prosser, E., and Co. (Sdney)  
Roberts (Paris, &c.)  
Rocke (Melbourne)  
Sharland & Co. (Auckland N.Z.)  
Shirreffs and Co. (Ahababad)  
Symes and Co. (Simla)

### BANDAGES

Bailey and Son  
Bole Hall Mill Co.  
Gibbs, Curson, and Co.  
Hutchinson, A., and Co. ("Heft")  
Liverpool Lint Co.  
Powell and Barstow  
Robinson and Sons  
Seabury and Johnson

### BANK

Birkbeck Bank  
Beds, WATER  
Hooper and Co.  
Hutchinson, A., and Co. (Sheeting Rubber)  
Peacock Bros.

### BEESEWAX & HONEY

Kemp, W., and Son



**BICARB. SODA**

Brunner, Mond and Co.  
Gaskell, Deacon and Co.  
Howard and Sons  
May and Baker

**BISMUTH PREP.**

Howard and Sons  
May and Baker

**BOOKS**

Dobell, Dr. (Roumemouth)  
James, Dr. (Proussier (Guide to New B.P.))  
Kimpston (Discount)  
Smith, J. G. ("Aerid Wtrs.")

**BOTTLES**

Ayrton and Saunders  
Barnett and Foster (the "Eclipse" Stopped)  
Brooks, Peel (Perfumers)  
De Luca, G. V.  
Harris and Co.  
Hearn, Riddle  
Isaacs, J., and Co.  
Kilner Bros.  
Poths  
Simcock, T.  
Simcock, W.  
Thompson, Millard and Co.  
Toogood (Feeding)  
Vallet

**BOXES**

Arundel (Folding Card)  
Austin and Co. (Cardboard)  
Ayrton and Saunders (Willow)  
Banks and Ratcliffe (Soaps, &c.)  
Bethell, Thomas P. (Folding)  
Eves' Turned Wood  
Metz, Paul (Pine and Willow)  
Noakes, B., and Co.  
Robinson and Sons (Cardboard)  
Rogers, J., and Co.  
Self-Opening Tin Box Co.  
Thompson Norris Manfg. Co.

**BROMIDIA**

Rattle and Co.

**BRUSHES**

Ashworth (Metallic)  
Dukes and Co.  
Gerard, A. (Toilet)  
Hinde Bros.  
Lynch and Co. (Electric)  
Titterton & Howard

**BUTTER COLOUR**

Bunsen, Benson and Co.  
Bush, W., Son, and Co. (Mari-goldine)  
Meyer and Henckel  
Oldfield, Pattinson and Co.

**CAMPFLEOR**

Howard and Sons (pathe)  
Keene and Ashwell (Homoe)  
May and Baker  
Murray, Sir James (Fluid)

**CAPSULES**

Betts and Co. (Metallic)  
Chevalier (Solubles)  
Denoual, J. (Medicinal)  
Hooper, B., and Co.

**CATALOGUES**

Bourne, Johnson, and Latimer  
Newbery and Sons  
Quarterly Price Current (Maw's)

**CEMENT**

Foulkes  
Kay (Cosgeline)

**CHALK PRECIP.**

Dunn and Co.  
Levermore and Co.

**CHEMICALS**

Bramwell, E., and Son  
Brunner, Mond and Co. (Bicar-bonate of Soda)  
Bush, W., and Co.  
Dunn and Co.  
Gaskell, Deacon and Co. (Bi-carbonate of Soda)  
Howard and Sons (Pharma-ceutical)  
May and Baker  
Oldfield, Pattinson and Co.  
Petri Bros.  
Smith, T. and H.  
Sumner, R., and Co.  
Sutton and Co. (Volumetric Analysis)  
Tyndke and King  
Zimmermann, A. and M.

**CHLOROFORM, &c.**

Duncan, Flockhart  
Macfarlan, J. F.  
Smith, T. and H.  
Zimmermann

**CHLORODYNE**

Bage, T., Blyton, and Co.  
Davenport (Browne's)  
Freeman  
Towle, A. P.

**COCAINE**

Howard and Sons

**COCOA & CHOCLETE**

Cadbury Bros.  
Fry (Malted)  
Richards, J. M. (Delacra's)

**COFFEE**

George and Welch (Dandelion)  
Symington (Various Essences)

**CORRUPT PAPER**

Thompson Norris Manufg. Co.

**COD-LIVER OIL**

Allen and Hanburys  
Baiss Bros.  
Beasley, J. E., and Sons (Iodized)  
Hooper, B., and Co.  
Jensen's "Iceberg Brand"  
Smith, T. J.  
Southall Bros. and Barclay (All)

**COMPRESSED MEDICNS**

Burroughs, Wellcome and Co.  
Dysdale and Co. (Leo's Chlor)  
Hooper, B., and Co.  
Leo and Co.  
Newbery, F., and Sons

**CORN CURE**

Chave and Jackson (Celandine)  
Harvey's Pencils (Hockin, Wilson and Co.)  
Robinson, B.  
Young's

**CRUCIBLES**

Morgan Crucible Co.  
Pat. Plumbago Co.

**DOG MEDICINES**

Spratts (Patent) ("Fibrine")

**DENTIFRICES**

Beddard, J.  
Jewsbury and Brown  
Martin, J. W. (Rozallum)  
Rimmel  
Sutton, O., and Co.  
Thompson and Capper  
Woods, W. (Arecs Nut)

**DENTISTRY**

Buck, F. (Lewsons)  
Jones, Dr. C. H. (Mechanical)

**DISINFECTANTS**

Calvert, F. C., and Co.  
Ginsale, J. T.  
Government Sanitary Co.  
Harrison and Co. (Hydrochloric)  
Hamilton and Co. (Carbolica)  
National Chemical Co.  
New Carbolic Sanitary Co.  
Rimmel  
Sanitas  
Steele & Co. (Chloride of Lime)  
Wyleys and Co. (Pure Eucalypt)

**DRUGGISTS' SUN.**

Ayrton and Saunders  
Baiss Bros.  
Bourne, Johnson  
Evans, Lecher and Webb  
Hockin, Wilson and Co.  
Lairitz (Pine Wool)  
Lynch and Co.  
Maw, S., Son and Thompson  
May, Roberts and Co.  
Newbery, F., and Sons  
Schutze and Co.  
Simcock, W.  
Thompson, Millard  
Toogood

**DRUG MILLS**

Bailey & Co.  
Burroughs, Wellcome and Co.  
Follows and Bate (Entrprs.)  
Werner and Pfeiderer

**DUBBIN**

Dales, J. T.  
Jamieson and Co.

**DUTCH MEDICNS.**

Bieber, J. D.

**DYES**

Ayrton and Saunders  
Farina, J. M. (Gegenther)

**EAU DE COLOGNE**

Farina, J. M. (Gegenther)

**ELECTRIC APPAR.**

Darton, F., and Co.  
Orme and Co.

**ENEMAS**

Ingram and Son  
Lynch and Co.  
Schutze and Co.

**ENGRAVERS**

Barker, W., and Son

**ESSENTIAL OILS**

Bush, W., Son and Co. (Imprs.)  
Bush, W., J. (Lemons, &c.)  
Clay, Dod & Co.  
Cocking (Japan Pepper)  
Jackson, J., & Co. (Peppermint, &c.)  
May and Baker  
Rocke, Tompsitt (Eucalyptus)  
Stallman and Fulton  
Stevenson and Howell  
Todd (Am. Peppermint)  
Wright, Layman and Unney

**ESSENCES, FRUIT**

Bush, W., J., and Co.  
Hay's Soluble Lemon, &c.  
Jackson, J., and Co.  
May and Baker  
Meadowcroft, W.  
Radlauer's Ess. of Pines  
Stevenson and Howell  
Sumner and Co. (Ginger Ale)  
Sutton, Francis and Co. (Standard Solutions)  
Tyndke and King (Pear and Pineapple)

**ETHER**

Duncan, Flockhart and Co.  
Howard and Sons (Chloric)  
May and Baker  
Robbins

**FORMULAE**

Brooks, T.

**EXTRACT, MEAT**

Brand and Co.  
Buryzone, Burbridges and Co.  
(Dr. Kochs)  
Cibis  
Coleman & Co.  
Edge Bros., Lin.  
Hugo, Brown and Co.  
Liebig Co.

**EXTRACTS, FLUID**

Baiss Bros.  
Barber, G., and Co.  
Buryzone, Burbridges  
Harker, Stagg  
Howard's Sons  
Stearns, F., and Co.  
Thompson, Henry Ayscough, and Sou

**FACE POWDERS**

Chubb, J., and Co. (Violet)  
Foulkes

**FEEDING BOTTS.**

Bourne, Johnson and Co.  
Hearn, Riddell and Co.  
Kilner Bros.  
Lang, J., and J.  
May, Roberts, and Co.  
Richards, Charles (Tube Cleaner)  
Simcock, T.  
Thompson, Millard and Co.

**FILTERING**

Doulton and Co.  
Judson, D., and Son  
Maignen (Filtre Rapide)  
Mawson and Swan  
Schwenker, R., and Co. (Paper)  
Silicated Crbn Filt. Co.  
The Chamberland-Pasteur Filter

**FOOD, INFANTS' AND INVALIDS**

Clarke, S. (Food Warmers)  
Jensen (Peptone)  
Nestle, H.  
Savory and Moore (Pancreatic)  
Nestle, H. (Peptonised Milk)  
Southall Bros. and Barclay (Prepared Malt)  
Van Abbott (Diabetic)

**FULLER'S EARTH**

Chubb, J., and Co.  
Hynam, J.  
Rouse and Co.

**FUNNELS**

Lynch and Co.

**GINGER ALE**

Bingley, J.  
Hay, W.  
Kimmond  
Mills, R. M.  
Rosa and Co.  
Schweppe (Dry)  
Sumner, R., and Co.

**GLYCERINE**

Fink  
Price's Candle Co.

**GRANULAR PREPARATIONS**

Allen and Hanburys  
Bishop, A.  
Bush, W., and Co.  
Clarke, Bleasdale, Eell and Co.  
Goodall, Backhouse and Co.  
Harker, Stagg and Moss  
Stearns, F., and Co.

**GRINDING MCHNS**

Bracher and Co.  
Follows and Bate  
Werner and Pfeiderer

**GUMS**

Fink (Arabic, &c.)

**GUTTA FERCHA**

Duncan, Flockhart  
Stevens, P. A. (White)

**HAIR PREPARATIONS**

Ayrton and Saunders  
Bates, P. F. (Fragra)  
Chesebrough Mfg. Co.  
James and Co. (Herbl. Pom.)  
Rimmel  
Sturrock's Oleaqua  
Towle Toilet Cream (Thorn-ton's)

**HARNES POLISH**

Jamieson and Co.

**HERBALISTS**

Butler, McCulloch  
Potter and Clarke  
Bristol and W. of England  
Epps, James, and Co.  
Gilbert, W.  
Gould, E., and Son  
Keene and Ashwell  
Leath and Ross  
Thompson and Capper

**HOMOEOPATHIC**

Bristol and W. of England  
Epps, James, and Co.  
Gilbert, W.  
Gould, E., and Son  
Keene and Ashwell  
Leath and Ross  
Thompson and Capper

**HOSPITALS**

London Homoeopathic

**ICE**

Barnett and Foster

**INK**

[See MARKING.]

Antoine  
Bewley and Draper  
Clarke, J. T.  
Duncan, Flockhart  
Jamieson and Co.

**INSECTICIDES**

Ford, Shaplaud and Co. (Fly Papers)  
Galzy, E.  
Harker, Stagg and Moss (Pdr)  
Judson and Son, Lam.  
Maw, S., Son, & Thompson (Insecticide-Vicat)  
Radlauer (Moth Paper)  
Sandford  
Sumner, R., and Co.  
Woolley & Son (Dalmatian pdr)

**KETCHUP**

Tyrer, P.

**LABELS**

Blake and Mackenzie  
Bowers Bros.  
Ford, Shaplaud and Co.  
Townsend (Exeter)

**LANOLINE**

Haller and Co.

**LARD**

Ewen, J.

**LEATHER**

Shaw, Alexander and John

**LEECHES**

Butler, McCulloch  
Fitch and Nottingham  
Potter and Clark

**LICORICE**

Craven, M. A., and Son

**LIME JUICE**

Felton and Sons (Specialite)  
Montserat (See Evans)  
Fiddle and Co. (Stowers)  
Ross and Co.

**LINSEED**

Kemp, W., and Sons  
Mumford

**LINT**

Liverpool Lint Co.  
Newsome (Surgeons)  
Robinson and Sons  
Seabury and Johnson

**LOOFARS**

Lynch and Co.  
Maw, Son and Thompson  
Toogood

**LOZENGES**

Blyton, T. Bage, and Co. (Medicated)  
Craven, M. A., and Son  
Gibson, R. (Manufacturer)  
Knoll's Apertin

**MAGNESIA**

Dinnford (Fluid)  
Murray, Sir James (Fluid)  
Southall Bros. (Liquor)

**MALT EXT., ETC.**

Poths (Dr. Linck's)

**MARKING INKS**

Barber, G., and Co. (Crimson)  
Christian, J.  
Clarke, J. T.  
Murphy, J.

**MENTHOL**

A I Menthol Depot, J. G.  
Shirley, Proprietor  
Boslim, J. (Charms)  
Christy and Co. (Cones)  
Cocking and Co.  
Hockin, Wilson & Co.  
Metz, P. ("Acme" cones)  
Todd, A. M.  
Dundas, Dick & Co.  
Maw, S., Son and Thompson  
Radlauer

**MERCURIALS**

Bush, W., and Co.  
Howard and Sons  
May and Baker

**METALLIC CASES, DRUMS, & KEGS**

Noakes, B., and Co.

**METHYLATED SPIRITS**

Burroughs, J.  
Gilb, I., Smith and Co.  
Harvey, J., and W.  
McNay and Co. (Cones)  
Phillips G., and Co.

**MINERAL OILS**

Joyce, S. C., and Co.

**MIXING**

Bracher and Co.  
Follows and Bate  
Werner and Pfeiderer

**MOKPHIA**

Macfarlan and Co.  
Smith, T. and H.  
Wink, J. A., and Co.

**MUSK**

Symes and Co. (Thibet)

**MUSTARD**

Finch, Rickman  
Johnson, J. H., and S. (Ess. Oil)

**MUSTARD LEAVS.**

Metz, Paul

**OILS, PAINTS, &c.**

Binghampton Oil Refining Co.  
Elvin Bros.  
Farmiloe, Geo., and Sons  
Follows and Bate (Mill)  
Holt, A., and Co.  
Joyce, S. C., and Co. (Petroleum, &c.)  
Peace, J. R., and Co.

**OUNTMENT BASES**

Boehm, Gus. (Petroleum Jelly)  
Chesebrough (Vaseline)  
De Pass, E. A., and Co. (Petroleum)  
Evens, Sons & Co. (Fossiline)  
Grindley (Petroleum Jelly)  
Haller and Co. (Lanoline)  
Metz, Paul & Co. (Pure Wool Fat)  
Saunders, C.

**PAPAIN**

Christy, T., and Co. (Papaine-Christy)  
Kühn, B. (Papain-Fink'er)

**PAPER (Sanitary)**

Mason & Co. (Waxed & Oiled)  
Sanitary Paper Co.

**PARALDEHYDE**

Zimmermann, A. and M.

**PATENT MEDICNS**

Atkinson (Infant Preserv)  
Barclay and Sons (General)  
Beecham (Pills)  
British College (Morrison's)  
Burgess, E. (Lion Ointment)  
Davenport (Chlorodyne)  
Edwards and Son  
Fennell's (Powders)  
Freeman, R. (Chlorodyne)  
George and Welch (Liver)  
Henry's Indian Remedies  
Holloway (Pills and Oint.)  
Hop Bitters  
Horsford (Acid Phosphate)  
Howell (Golden Herb Pills)  
King Bros.  
King, Alt. (Hop Bitters)  
Lairitz's Pine Wool  
Lalor (Phosphoric, &c.)  
Lalorin (Clarke's Mix.)  
Leary, E. B. (Kor Kur)  
Munlay, J. (Injection Day)  
Newbery and Sons  
Richards, J. M. (American, &c.)  
Roberts (Foreign)  
Sanger and Sons  
St. Dalmas (Bronchial, &c.)  
Smith (Antibulious Pills)  
Spratts (Locumium Oil)  
Stearns, Non-secret  
Stedman (Tooth-Powder)  
Sumner and Co. (Angel's Food)  
Thompson, Millard and Co.

**PENS**

Gillott

**PERFUMERY, &c.**

[See EAU DE COLOGNE.]  
Barclay and Sons  
Boehm (Gustav) (Various)  
Briedenbach (Smelling Salts)  
(Inexhaustible)  
Bristow, T. F., and Co.  
Chesebrough Manufacturing Co.  
De Pass & Co. (Peach Blossom Soap)  
Ewen (Soaps)  
Houbigant (Perfume)  
Jackson, J., and Co. (Lavender)  
Mann, C. A.  
Mousson and Co. (Toilet Soap, &c.)  
Newbery  
Pears, A. and F., Soap  
Rimmel, E. (Specialities)  
Rowland and Son (Various)  
Sainsbury, S. (Lav. Water)  
Shaw, Alex. and John (Perfumery Capping)  
West, T. (Okell's Monna)  
Whitaker and Grossmith  
Woolley, Sons and Co. (Powder)  
Yardley and Co.

**PEPSINE, &c.**

Bullock and Co.  
Burroughs, Wellcome  
Jensen, C. L.  
Keene and Ashwell  
Savory and Moore (Pancreatic Emulsion, Peptonised Milk)  
Werner and Co. (Ingulin)  
Zimmermann

**PEROX. OF HYDR.**

Dunn and Co.  
Robbins

**PHOTOGRAPHIC**

Houghton, G., and Sons  
May and Baker  
Newton and Co.  
Sellers, J. (Carmin Pur.)

**PILLS (Coated, &c.)**

Beecham  
Clarke, Bleasdale and Co.  
Dodd and Co.  
Holloway  
Howell  
"Mc K. & R."  
Simpson's Herbal  
Smith, W. F.  
Warner, W. R. (Coated)  
Wyleys and Co. (Gelatine Oval)



**PHARMACEUTICAL PREPARATIONS**

Allen and Haubury  
Baiss Bros.  
Barron, Squire and Co.  
Battle and Co. (Bromidia)  
Burgoyne, Burbridge and Co.  
Burroughs, Wellcome (Various)  
Chevalier, F. (Solubles)  
Clay, Dod and Co.  
Duncan, Flockhart  
Fletcher, Fletcher, and Stevenson  
Gibson, R. (Lozenges)  
Harker, Stagg (Various)  
Hewlett and Sons  
Howards and Sons  
Kay Bros.  
Keith (Conc. Tinctures)  
Marindale (Nitroglycerine)  
Stearns (Non-secret)  
Wink, J. A., and Co.  
Woolley, Sons  
Wright, Layman and Umney  
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Maw, Son and Thompson  
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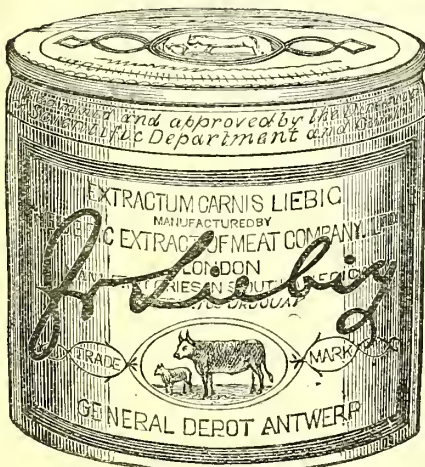
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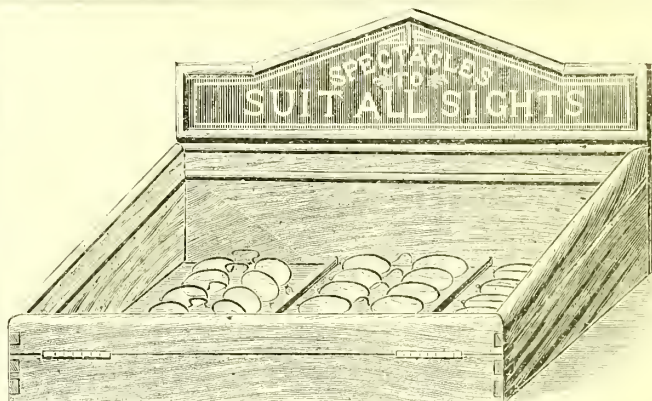
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OF MEAT.**Being the Finest Meat-flavouring Stock, USE  
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**ONLY SORT GUARANTEED GENUINE BY BARON LIEBIG.**



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THE CHEMIST AND DRUGGIST says:—"The cases are well made, and are quite ornamental, and the spectacles are sold at very moderate wholesale prices, presenting an opportunity for a rate of profit to which chemists are getting unaccustomed."



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2 Dozen Steel Frame Spectacles, Joints, with Screw and Pin .. .. .	to sell 1/0 per pair	7 0
1 " Ditto, better quality, stout frames, Straw or Blue Steel .. .. .	" 2/6 "	10 6
1 " Folders, Steel Frames and Placquets .. .. .	" 1/0 "	5 6
1 " Leather Tuck Spectacle Cases .. .. .	" 6 1/2 each	2 6
1 " Folder Cases .. .. .	" 4d. "	1 6
Show Case and Sight Tester		15 0
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## Our £3 3s. Case contains -

		s. d.
2 Dozen Steel Frame Spectacles, Joints, with Screw and Pin .. .. .	to sell 1/0 per pair	7 0
1 " Better quality ditto, Straw or Blue Steel, best White Glasses .. .. .	" 3/6 "	15 0
1 " Folders, Steel Frames and Placquets .. .. .	" 1/0 "	5 6
1 " Best Nickel Folders .. .. .	" 3/6 "	16 0
1 " Spectacle Cases, Leather .. .. .	" 6 1/2 each	3 0
1 " Folder Cases .. .. .	" 4d. "	1 6
Show Case and Sight Tester		15 0
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Larger size Cases, prices £6 6s., £10 10s., or £21.

Send for fully Illustrated Price List and Descriptive Pamphlet, with Table of Sights, post free on receipt of Trade Card.

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SPECTACLES and FOLDERS in Gold, Silver, and Steel.

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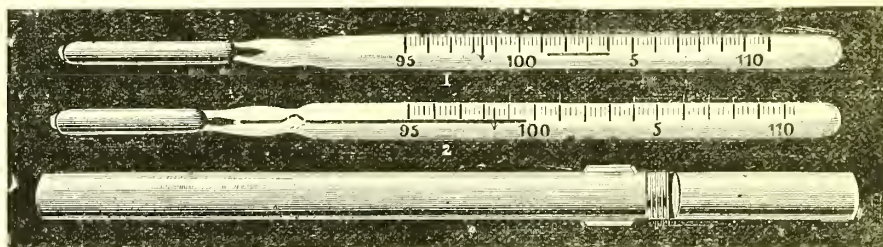
TERMINALS, CLAMPS, and BATTERIES of all kinds.

Lists on application Post Free.

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## DARTON'S IMPROVED IMPERISHABLE INDEX CLINICAL THERMOMETERS

As specially noticed in the *Lancet*, *Chemist and Druggist*, &c., can be obtained only of the Inventors and Makers; cannot get out of order, and are therefore specially suited for Export.



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Ordinary pattern, contracted stem, in German silver cases, 4, 5, or 6 in. .. 30/ per doz.  
Improved broad bore ditto (small bulb), flat and magnifying, ditto .. 48/ "

A cheap substitute for the lens front form.

### No. 2.

Darton's Improved Imperishable Index .. 42/ per doz.  
Ditto, improved broad bore, magnifying, &c. 54/ "  
Ditto, lens front magnifying .. 78/ "  
One bent and one straight 6-in. Clinical Thermometer in morocco snap case .. 9/ the set.

Kew Certificates to any of the above 15/ doz. extra. SPECIAL QUOTATIONS FOR QUANTITIES.  
Boxwood Scale Thermometers, spirit and mercury tubes, 6, 7, 10, 15/ per doz. Bath Thermometers, in japanned tin case, silvered metal scale, 12/ doz.; enamel tube ditto, 15/; ditto, with porcelain scales, 24/ doz.

Lactometers for Testing Milk, 7/ and 16/ per doz.

Firms ordering Clinical or other Thermometers in quantities of not less than 1 dozen may have their names engraved thereon free of charge.

The Trade are cautioned against purchasing worthless imitations of F. Darton & Co.'s goods. In ordering through an Agent please state F. Darton & Co.'s goods only are required.

# F. DARTON & CO.,

Makers to H.M.'s Government.

Estab. 1834. 45 ST. JOHN ST., WEST SMITHFIELD, E.C. Estab. 1834.



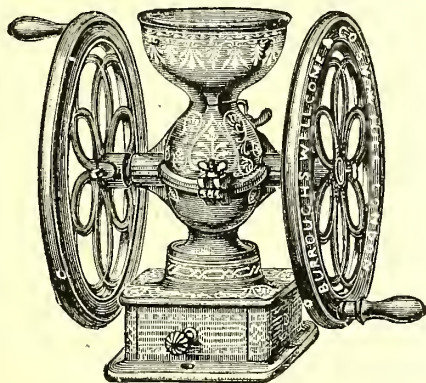
# NEW IMPROVEMENTS.

## THE AMERICAN (ENTERPRISE) DRUG MILL.

CONSTRUCTED ON AN IMPROVED PRINCIPLE.

This is certainly the most perfect machine for grinding drugs that has yet been invented, both as regards simplicity of parts and efficiency in working.

A great improvement has been effected in this Mill. The grinders or cutters are now cut to a much keener edge than before, thus ensuring a closer contact and reducing the



drugs, when it is necessary, to an almost impalpable powder. The general construction has also been improved, rendering it easier to work.

This Mill can be regulated to grind to any degree of fineness or coarseness required, and by the mere turning of a thumb-screw can be opened and the cutters removed in a minute.

The form of the cutters is designed so as to crush and reduce to powder almost any substance, effectually and quickly, at the same time that the cutting edge is never destroyed, thus saving the expense of re-cutting, incident to the ordinary Mill.

The cutters always keep their edge, and never require re-toothing; if broken they can be replaced at a trifling cost.

In this Mill ALONE there is no danger or loss resulting from grinding any number of different substances in succession, because between each operation the Mill can be opened, the cutters taken out, cleaned, and replaced with the greatest ease.

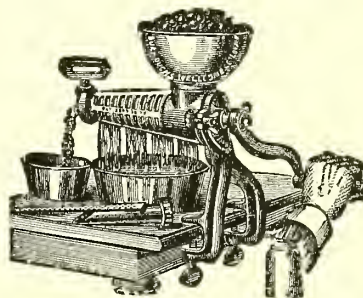
Professor MAISCH, Philadelphia Coll. of Pharmacy, U.S.A., says:—"The best Mill that has been devised. One of the prominent advantages is the facility with which the internal working parts can be viewed by simply turning one screw."

The prices are as follows:—Three Sizes (Ornamental), £2 10s.; £3 10s.; £5 10s.; Three Sizes (Plain), £2; £3; £5. Subject to the usual Discount.

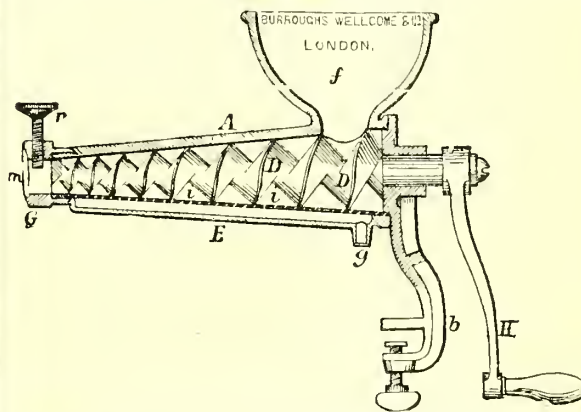
# THE ENTERPRISE TINCTURE PRESS.

*Specially Adapted for Coarse and Fibrous Drugs.*

The principle upon which the Press operates is, that the drug is acted upon in a continuous thin layer, which is forced forward by each revolution of the screw into smaller and smaller space, the leverage yielding a force so powerful as to extract almost the entire moisture, delivering the residue of suitable drugs with almost crisp dryness, and, as experience has shown, it saves a greater amount of tincture (very important in the case of Tincture of Opium and other expensive drugs) than even the most



powerful hydraulic press. So thorough is its action in this respect, that the *Chemist's Journal* has humorously remarked of it, that "it will almost squeeze blood out of a turnip." One firm informs us that they have saved at least £20 more in three months by the use of this Press than they could secure by using any other. The working of this Press being



continuous, either small or very large quantities may be operated upon at one time, and much more rapidly than in any other form of apparatus.

The fact that drugs require handling but once, that the use of press cloths is done away with, and that the operation is continuous, shows a great advantage in this Press over any other.

Price 15s. Subject to the usual Discount. Obtainable from every Wholesale Druggist.

The Sole European Agents are BURROUGHS, WELLCOME & Co, Snow Hill, London.



WE ARE NOW ADVERTISING EXTENSIVELY

## PETROLEUM "WHITE VASELINE" JELLY.

In Collapsible Tubes, 8d. ... 5/ per dozen. Ditto, Perfumed, 9d. ... 6/ per dozen.  
 „ 2-oz. Bottles, 1/ ... 8/ „ „ 1/ ... 8/6 „  
 „ 5-oz. „ 2/ ... 15/ „ „ 2/ ... 16/ „

The Bottles are put up in Cardboard Cases, the same as "Vaseline" No. 1 and No. 2 sizes.

Also "VASELINE OIL" (Perfumed) for the Hair, 1s. bots., 8s. per doz.

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 Proprietors and Sole Manufacturers of the "VASELINE" Preparations.

## DR. OSCAR LIEBREICH'S LANOLINE.

*Messrs. Benno Jaffé & Darmstaedter's New Lanoline Works are now in full working order, and the product manufactured on a larger scale is of greatly improved appearance. It is of much lighter colour, and almost free from odour; is perfectly neutral, and guaranteed chemically pure. It is now also of suitable consistency for Ointments, and no longer requires the addition of Lard.*

*The quality hitherto supplied we are now offering at a Reduced Price for the manufacture of Cosmetical preparations.*

Please order ORIGINAL 7-lb. Tins to ensure proper percentage of water.

Sole Wholesale Agents: GEO. HALLER & CO., 50 Lime St., London, E.C.

Drugs, Chemicals, Pharmaceutical Preparations.

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## SPECIALITIES :

Concentrated Infusions  
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Vegetable Colours  
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Soluble Essences of Lemon, Orange, Ginger, &c., &c., for the Aerated Water Trade.

IMPERIAL BOUQUET, a very choice and lasting perfume, price 8s. 6d. per lb.; 8s. in Wr. Qts.

VEGETABLE BUTTER COLOURING (as DANISH). This preparation is superceding Annatto, Carrots, and all other colorants, and where once tried is always used.

## PRICES—

Bulk, 1s. 2d. per lb., 5 per cent. discount.; Bottles, 4s., 8s., 16s. per dozen, 10 per cent. discount.

SPECIAL QUOTATIONS TO LARGE BUYERS.





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OUR THIRD POST-CARD COMPETITION has been decided by the award of two prizes of one guinea each, one to Mr. C. C. Bell, of Epworth, and the other to Mr. H. Herbert, of London.

A FOURTH POST-CARD COMPETITION was announced last week, and is open till Saturday next, June 19. We offer one guinea for the best quotation, not to exceed fifty words, but may be very few, from any standard English or Latin author, prose or poetical, suitable for the title-page accompanying the index of this journal. Any subscriber or employé of a subscriber may compete. Quotations must be sent in on post-cards, and the post-card must not deal with any other subject. The name of the author and the reference to the work quoted from should be given, and in case of Latin quotations it is desirable that an English version should be appended.

MESSRS. W. T. JACKMAN and J. D. WEBSTER have successfully photographed the retina of the living human eye, the photograph showing the physiological cup in the centre of the disc and the blood-vessels very distinctly.

A NEW SOCIETY has been formed for the county of Middlesex, which will be similar to other county scientific societies, and will embrace the usual subjects of natural history, botany, and whatever is generally included under the term science. Lord Enfield, the Lord Lieutenant of the county, is to be the first president; the Earl of Crawford and Balcarras, the Earl of Aberdeen, the Marquis of Ripon, Professor T. H. Huxley, Sir John Lubbock, Professor W. H. Flower, Sir Frederick Abel, and Dr. Archibald Geikie, are the vice-presidents. Mr. Sydney T. Klein, Clarence Lodge, Willesden, N.W., will answer any inquiries regarding the society.

THE NEW PHARMACOPEIA was to have been published by the Medical Council at as near cost price as possible. That body's anxious efforts to make no profit have not succeeded. After selling 19,000 copies out of 20,000 printed, a trifling profit of 800% has already made its appearance—a sum almost as great as writers of works on materia medica generally make on their first editions.

THE PARIS PHARMACEUTICAL SOCIETY'S MEETING held on Wednesday last will be found reported in our French correspondence. At the School of Pharmacy, M. Chatin has temporarily retired from his directorate and botanical lectureship, and his substitute in the latter position has been welcomed with significant applause.

MR. WILLIAM SOUTHALL, F.L.S., until recently a member of the Board of Examiners and a partner in the firm of Southall Brothers & Barclay, Birmingham, died on Wednesday last, in his sixty-first year.

AN EMPLOYER AND HIS ASSISTANT have completed their association by a round in the Southampton County Court, and the latter has established the legal principle that a charge of slowness is not sufficient to justify the employer in discharging a servant without a proper notice or an equivalent payment.

MR. HAWTAYNE, who represents British Guiana at the "Colinderies," was complaining in a speech at the City Liberal Club, a few days ago, of the ignorance often manifested in regard to the British Colonial Empire. He had occasion, he said, to send out in Kensington for some articles required for his section, and his messenger mentioned to a certain tradesman that the goods were "for British Guiana." "No," said the British trader, "that won't do for me. I have been a farmer myself, and I know there's nothing like the Peruvian."

THE TEN THOUSAND PRESCRIPTIONS.—The *Homoeopathic World*, quoting from our analysis of ten thousand prescriptions, discovers from it that routine still dominates the prescribing of the old school. After noting the twelve medicines most frequently prescribed, the *Homoeopathic World* says:—"Tincture of aconite was prescribed 157 times, Fleming's tincture of aconite 5 times, arnica 6 times, caulophyllum 1, cimicifuga 19, gelsemium 56, ignitia 1, nuxvomica 468, hydrastis 2, extract. hydrast. liquid. 2, hydrast. Can. pulverat. 1, phosphorus 13, hamamelis 13, hamameline 1, hazeline 15, and pulsatilla 6 times, which shows that the lead of the Bruntons and Ringers is being pretty extensively, if timidly, followed."

THE OPACITY OF SHELLAC is to some extent attributable to a slight excess of water. The subject is fully discussed by Mr. Ogston in our Trade Report.

HALF AN OUNCE OF STRYCHNINE was put into his own mouth on Friday of last week by John Ball, a carrier of Leek, as a rebuke to his wife, with whom he had been quarrelling. Mrs. Ball screamed, and Serjeant Langdon attended. His method of treatment was not exactly what is prescribed in the books, but the Medical Council would find it difficult to suggest a better. He first seized the man by the throat, and with his fingers dragged out from his mouth all there was solid. Then he rubbed Ball's teeth with soft soap till he made him vomit well, and finally handed him over to the legitimate practitioners, who applied the stomach pump, and to the magistrates, who, having taken sureties for the future, discharged Mr. Ball with a caution.

HAPPINESS has not, it appears, as the poet once assured us it had, her "seat and centre in the breast." Dr. Theodore Meynert, a "professor of nervous diseases," knows better than that. This gentleman, according to the *Zoophologist*, has written a big book on "Psychiatry, a Clinical Treatise on Diseases of the Fore-Brain," just republished in English in



London and New York. The undisguised and frank materialism of this work appears to verify the assurance of the reviewer that "the author is completely on the side of the physiological psychologists." We are told that "The sensation of happiness is ascribed (by Dr. Meynert) to a determination of arterial blood to the fore-brain, that is, to a functional hyperæmia."—"O Happiness! Our being's end and aim," as Pope very improperly described thee! art thou, after all, *not* the *Erdaimonia* of the contented and virtuous soul, but only a "determination of blood to the fore-brain!"

\* \*

#### DIARY FOR NEXT WEEK.

*Wednesday, June 16.*—Aberdeen and North of Scotland Society of Chemists and Druggists, Annual Dinner, Kintore Arms Hotel, Inverness, at 3.30 P.M. Aberdeen members leave Society's Rooms, 21 Bridge Street, at 8.30 A.M.

*Thursday, June 17.*—Public sales of gums, Commercial Sale Rooms, at 11.30 A.M.

Public sales of Cinchona bark, 6 Mincing Lane, at 1 P.M.

Chemical Society, Burlington House, at 8 P.M. Ballot for the election of Fellows, and the following papers will be read:—

1. "The Electrolysis of Aqueous Solutions of Sulphuric Acid." By Prof. H. McLeod, F.R.S.

2. "Essential Oils (Part III.), their Refractive and Dispersive Power." By Dr. J. H. Gladstone, F.R.S.

3. "The Formation and Destruction of Nitrates and Nitrites in Artificial Solutions and in River and Well Waters." By J. M. H. Munro, D.Sc.

4. "An Apparatus for Distillation under Reduced Pressure." By Dr. W. H. Perkin, F.R.S.

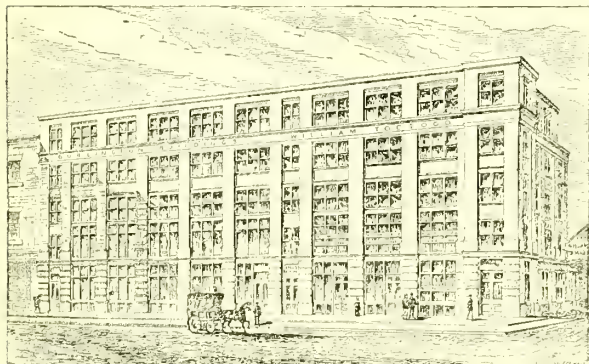
5. "The Electromotive Force produced by the Combination of Cadmium and Iodine in Presence of Water." By A. P. Laurie.

6. "A Method of Investigating the Constitution of Azo-, Diazo-, and Analogous Compounds." By R. Meldola, F.R.S., and F. W. Streatfeild.

Dr. Redwood's fourth lecture on Galenical Pharmacy, at 17 Bloomsbury Square, at 4 P.M.

#### DRUGGISTS' BOTTLES.

**MR. WILLIAM TOOGOOD**, who has just removed his business from Mount Street to Burlington Buildings, Heddon Street, Regent Street, was visited by one of our representatives at his new premises. Heddon Street has become quite a business quarter, and Mr. Toogood's large grey building, just finished, is one of its most prominent features. The basement is used for packing, and town orders



are received and delivered on the ground floor. On the first floor we find a large and well-lighted show-room and offices; the former when finished will be entirely painted in black and gold. Fireproof ceilings separate all the floors in the building, and two lifts work from the basement to the top of the building, a drop of nearly 64 feet. The larger lift will carry 15 cwt., a capacity suitable for personal use. Internal communication is promoted by speaking-tubes, and the office is connected by telephone with the rest of the metropolis. The three floors above the show-room contain stocks, bottles

of all sizes and qualities, from the heavy Winchester to the small and elegantly shaped perfumery bottle, being the leading articles. These bottles are arranged with extreme neatness in galleys crossing the floor and divided into bins, of which there are over 900 on each floor. Each bin holds from 8 to 20 gross of bottles. Along the walls of each room are counters, containing drawers filled with corks, wooden stoppers, and various "druggist's sundries." Pomade bottles are all packed in the familiar cardboard boxes, each containing one dozen separate compartments, thus securing safe carriage. The cost of the boxes is balanced by the saving in labour. The firm make a speciality of poison-bottles, which they keep in many sizes, shapes, and colours. There are fashions in bottles as in everything else, as Mr. Toogood knows to his cost, for frequently it occurs that a certain model does not sell sufficiently to recoup the cost of manufacture, and leaves the merchant with a heavy and depreciated stock. But, as our guide philosophically remarked, it is possible to revive a fashion sometimes. "Here, for instance," producing an ungainly-looking specimen of fashionable-brown hue, "is a bottle which we sold thirty years ago. It has been dead stock until we revived it recently for hop preparations, for which it has had a success beyond anticipation."

"Nearly all our bottles," the head of the firm continued, "are of British manufacture. We do a large export trade, principally with the colonies, but also with France and other parts of the Continent. The Spanish tariff has until now been prohibitive, but we hope to find a market in the Peninsula shortly, when the new treaty comes into force."

"Our policy," said the junior partner, "has always been to encourage chemists to put up their own specialities. We are continually bringing out new bottles for the sale of 1s. or 2s. articles. This thick glass bottle, which makes a bulky parcel, and which we call the "Mexican," has taken marvellously. We take the trouble to get labels adapted to our bottles; even then," added Mr. Toogood, "chemists are not content unless we give them the recipe for what they are to put in the bottle." During this conversation we have left the bottle department, and find ourselves among the loofahs, which Mr. Toogood spells "ilophars," which certainly gives an Oriental appearance to the word. As a matter of fact, most loofahs now come from Japan, but the public know the Egyptian loofahs only, and will have them under that designation. The demand for the article, we are told, is continually increasing. Here are powder-puffs of swan-down. This down, which comes largely from Holland, has lately been very scarce, so the idea has been hit upon to make the puffs of white velvet, and many customers give the latter the preference. Mr. Toogood does his own turning, though not on the Heddon Street premises. Of corosos nuts he uses large quantities, but the difficulty is to find round nuts. The wedge-shaped are common enough, but do not answer so well. Sometimes consignments of nuts are found in the market which suit to a nicety, and then no time is lost in purchasing them. A few years ago Mr. Toogood secured a large parcel of Coquilla nuts, but he has never been able to discover another suitable lot.

The well-known turned wood boxes for medicine-bottles, &c., are all made of Turkey boxwood, the only wood suitable for this sort of work which does not discolour with age. Wood in planks cannot be used, only the larger branches and logs, as each article must be turned so as to have the heart-wood in the centre, or it is liable to split. During the Russo-Turkish war of 1876 the Russians burned the whole stock of Turkish boxwood at Kezanlik and elsewhere, and since then the wood has been most difficult to procure. West Indian boxwood is not so good as Turkish; satinwood answers fairly well, but then it is mostly in planks. "You will notice," said Mr. Toogood, as we took our leave, "that we wash the bottles for our customers, if they wish it. For this we make a small charge, but we are the only firm in the trade that wash bottles at all."

**WHAT THE TONGUE INDICATES.**—A white tongue denotes a febrile disturbance; a brown, moist tongue—indigestion; a brown, dry tongue—depression, blood poisoning, typhoid fever; a red, moist tongue—inflammatory fever; a red, glazed tongue—general fever, loss of digestion; a tremulous, moist, and flabby tongue—feebleness, nervousness; a glazed tongue with blue appearance—tertiary syphilis.



## Metropolitan Reports.

### DEFECTIVE SPIRIT OF NITROUS ETHER.

AT the Thames Police Court, on Thursday, June 6, Mr. John Reid Morrison, a medical practitioner, of 57 Cannon Street Road, St. George's-in-the-East, was summoned for selling a quantity of spirit of nitrous ether, not of the nature and quality of the article demanded, the drug being deficient in nitrous ether to the extent of 80 per cent. Mr. George Hay Young defended. Mr. William Raines, sanitary inspector to the parish of St. George's-in-the-East, said that the defendant kept an open shop. On May 10, about eleven o'clock, witness called at the shop and asked for 2 oz. of spirit of nitrous ether, which the defendant served him with, and for which he paid 8d. Witness then told him that it would be analysed by the public analyst. The analyst's certificate showed that the drug was deficient in nitrous ether to the extent of 80 per cent. Mr. Young submitted that there had been no offence. The article was pure, and the deficiency was caused by decomposition and evaporation. Mr. John Beckett, assistant to Dr. Tidy, at the London Hospital, said he had analysed the sample of the drug submitted to him by the defendant, and found it to be pure. The nitrous ether was liable to decomposition and evaporation. There was certainly a deficiency. Every time the bottle containing the drug was opened some of the nitrous ether would go out. Mr. Hannay said it was too important a question for him to decide at once, and he adjourned the case for a week.

The case was resumed at the Thames Police Court on Thursday, June 13, before Mr. Lushington. Mr. G. H. Young again appeared on behalf of the defendant. Mr. William Raines repeated his evidence. Mr. William Charles Young, public analyst for the district of Poplar, Whitechapel, and St. George's, said he received from the last witness a sample of nitrous ether. He analysed it, and found that the specific gravity was 0.843, and when tested by official tests it showed a deficiency of 80 per cent. He wished to say that the calculation was based upon the lowest standard stated in the British Pharmacopœia for 1885, and not the highest. Cross-examined: Nitrous ether was very volatile, and was liable to evaporation and decomposition. This was the complainant's case. Mr. Young, on behalf of the defendant, contended that Mr. Raines got what he asked for. It had not been shown that any adulteration of the drug had taken place. Mr. John Bickett, assistant to Dr. Tidy at the London Hospital, said he had analysed a sample of nitrous ether given to him by the defendant. He found that it had not been adulterated with water. Nitrous ether was very volatile, and would deteriorate from natural causes. The sample was pure nitrous ether, but it was deteriorated in quality. This was the defendant's case. Mr. Lushington said that it appeared to him that under the Act the defendant was bound to sell the drug in a state of purity and without deterioration. That had not been done in the present case, and he therefore must convict the defendant in a penalty of 20s.

THE ST. JOHN'S AMBULANCE ASSOCIATION, No. 14 district (Kilburn and neighbourhood), have issued a neat and convenient pocket card, which shows the stations in the district where stretchers, wheeled litters, and other appliances are kept for ready aid to the wounded. Each station is marked, on a map of the district, with a Geneva cross; and there are other references on the card which should tend to bring the wounded under proper care in a very short time. Mr. C. B. Allen, 20 High Road, Kilburn, is honorary secretary and superintendent of ambulance.

DAMAGING TARTARIC ACID.—In the City of London Court, on Monday, June 7, before Mr. Commissioner Kerr, the case of "Crook v. London and Rotterdam Steamship Co. and Owen" was decided. The plaintiff, Mr. Walter J. Crook, merchant, of 35 Cheapside, E.C., sought to recover the sum of 13s. for loss and charges on a quantity of tartaric acid damaged in transit by the alleged negligence of the defendants. The plaintiff's representative said they delivered some tartaric acid to the defendants as owners of the steamship *Corsair* in good order. When delivered by the defendants, it was found to have been damaged during transit. The case was not defended, and judgment was entered for the plaintiff for the amount claimed, with costs.

A SALAMMONIAC ACCOUNT.—In the City of London Court, before Mr. Commissioner Kerr, on Tuesday, the case of "Caudery & Wightman v. Townson" was decided. The plaintiffs, Messrs. William Caudery and Charles Collins C. Wightman, merchants, carrying on business at 150 Fenchurch Street, E.C., sought to recover from Mr. Robert Townson, chemical merchant, of 54 Shirlock Road, Haverstock Hill, N., the sum of 10*l.* 13*s.* 9*d.* alleged to be due for three casks of crushed salammoniac supplied to him. Mr. Stoneham appeared as solicitor for the plaintiff. There was a counterclaim raised for 6*l.* 14*s.* 9*d.* for loss which the defendant alleged he had sustained through the salammoniac not being of the proper quality. Mr. James, in the employ of the plaintiffs, proved the sale of the goods. The defendant: They supplied me with a different article on this occasion; it was inferior to the other lots which I have had from them. The Lord Commissioner: Have you had the goods? The defendant: Yes, sir.—The Lord Commissioner: Then why don't you pay for them? The defendant: Because I cannot use them. I have had one lot since November, 1885, but the other two cases are of a different quality. I cannot sell the first one they sent me.—The Lord Commissioner: Did you buy them on "sale or return"? The defendant: No; I bought them according to sample.—The Lord Commissioner: Where is the sample? The defendant: But they are unsaleable. They have been on my hands for six months.—Mr. Stoneham: They were not sold by sample. The defendant: But I say they are unsaleable.—The plaintiffs' representative: The amount he complains of is for goods supplied in November, 1885. He bought them under a contract, and the contract says they are to be of "good merchantable quality, and customary condition."—The learned Judge: There is nothing here in this contract about samples. You must pay the man his money. Judgment was accordingly entered for the plaintiff for 10*l.* 13*s.* 9*d.* and costs, and the counterclaim of 6*l.* 14*s.* 9*d.* was disallowed.

## Provincial Reports.

### LINCOLN.

THE SALE OF MORPHIA.—At an inquest held last week on the body of James Blackwood, a picture frame maker, aged 56, the following evidence was given.

John Harrison (Boot's drug stores, High Street) said: I sold the morphia—7 grains—to the deceased. I asked him if he was aware it was poison, and he said he was perfectly aware of it. I cautioned him twice respecting it. I have known him a year and a half, and noticed nothing different in his manner. He said he wanted it for a pain in his head.—The Coroner: Is it usual for you to supply strong poison like this to people knowing nothing about it, for a pain in the head? —No, unless we think they have a knowledge of poisons. I have frequently supplied him with poisons.—Not of that description for self-administration?—I have sold him laudanum—Are you a qualified chemist?—Yes, by examination.—You must know that a man in that class of life is not in the habit of administering morphia to himself?—In a city like Lincoln a great many people take narcotics.—Yes, but not morphia. You have incurred a great responsibility. You supply a man with 7 grains of morphia, who knows nothing about prescribing it, and without his bringing any prescription from a medical man.—Witness, continuing his evidence, said: The deceased was rather curious in his manner at all times. Morphia is one of the things which has not to be signed for. The man seemed quite sober when he came for the morphia. It was about ten o'clock in the morning.

Mrs. Blackwood, wife of deceased, said her husband came in about twelve o'clock on the Tuesday, and said he had been taking some medicine, or poison, or something of that kind. She sent to Mr. Boots, and the boy came with a powder—an emetic, or something—and gave him it. He got no better, and she sent for Dr. Harrison, who came very quickly, and attended to him. Her husband used to drink on Saturdays and Sundays. He complained of his head being bad. He did not tell her that he had taken poison as though he meant to kill himself. He commenced to get something to eat, and she did not believe he intended to commit suicide. He said



he was afraid he had taken too much. She had seen her husband take the powder before, and also laudanum.

John Harrison was then recalled, and the Coroner asked him if he knew Mrs. Blackwood sent to his shop. He replied in the affirmative.—The Coroner: Why did you not mention it before, and why didn't you go to the house yourself?—I could not leave the shop, and I sent the boy with an emetic, and told him to tell them to send for a doctor as soon as possible.—In answer to a juror, witness said he told the deceased it was a dangerous poison.—The Coroner: Did you tell him what was a dose?—No.—A juror: How much did he ask for?—Threepennyworth.—Did you tell him what quantity destroyed life?—No.

Medical and other evidence having been offered, the Coroner said the deceased appeared to have been a drinking man, and no doubt had considerable pain in the head. To relieve that pain he procured the morphia. All the evidence before them went to prove that he took the morphia as a medicine, and of course a man in deceased's position of life would not be likely to know what one of the medical witnesses told them—that a single grain was dangerous, and that 5 grains were almost always fatal. They could not help blaming the druggist who supplied a man in deceased's position of life with 7 grains of morphia, without explaining to him that that was very much more than an ordinary dose of that poison. The man asked for threepennyworth, which he would, no doubt, think was a very small quantity, but unfortunately it was not a small quantity, and it was very wrong not to caution the man or some one belonging to him that he had got a very much larger quantity than a dose. Druggists in Lincoln were, as a rule, very cautious, but he could not say that in this case proper caution had been exercised.

The jury returned a verdict that the deceased took the poison inadvertently, and requested that the chemist should be called in, and asked to be more careful in the future.

The chemist, John Harrison, was then called into the room, and informed of the verdict of the jury. The Coroner said as a qualified chemist he ought to know what the effects of that deadly drug were, and he ought not to have allowed a man in the position of life of the deceased to have had that quantity without explaining to him how many people it was likely to kill. Although he was not legally liable, he was morally. Mr. Harrison had said he warned the man twice, but he did not tell him that he had a sufficient quantity to kill probably two or three people. He (the Coroner) was sure his own conscience would be quite sufficient to condemn him in the matter.

Mr. Harrison said he had been in the business 28 years, and had always tried to conduct it in a careful manner. He knew by practical experience it was a very difficult matter to know always what sort of people they were selling poison to, when it was a case of almost hourly application.

The Coroner: You don't mean to say you have hourly applications for morphia?

Mr. Harrison: No, but for other poisons.

The Coroner said that was a very different matter. After 28 years' experience he ought to have known better.

#### MIDDLESBOROUGH.

**ATTEMPTING TO STEAL A TRADE SECRET.**—At Middlesborough Police Court, on Monday last, before the Stipendiary (Mr. C. J. Coleman) and the Mayor (Alderman Weighell), John Edward Ackroyd, described as a pipe inspector, residing at Coatham, was brought up in custody charged with inciting certain persons in the employment of Messrs. Bell Brothers, ironmasters and chemical manufacturers, of Port Clarence, Middlesborough, to commit a felony. Messrs. Bell Brothers manufacture and use bicarbonate of ammonia at their works. There is a certain amount of secrecy involved in the manufacture of the chemical, the process having been partly acquired and partly developed by the firm, at considerable cost, and naturally they wish to keep the secret of the manufacture to themselves. Prisoner had obtained leave to see through their chemical works, and on the previous Thursday he called there and asked a foreman in the chemical sheds, named Gallagher, to give him a sample of the bicarbonate of ammonia. Gallagher told him such a thing was utterly impossible. The chemical would not be allowed to be taken from the works at that stage in its manufacture, as they were most particular in keeping the secret. Prisoner

did not say for what purpose he required the chemical, but shortly afterwards asked one of the men employed in the same department, named Grimes, to get him a sample. Grimes told him he could not think of such a thing; but next day he received a letter from prisoner again pressing him to procure a sample of the bicarbonate of ammonia, or to find some one who would do so. Grimes showed the letter to another man, named Wilkinson, who undertook to get prisoner a sample for 5s. Prisoner again visited the works, and Wilkieson gave him a bottle full of the chemical, receiving the money agreed upon; but Mr. C. Lowthian Bell, one of the firm, happening to be near, saw the money pass, and, suspecting something, gave prisoner into custody. On being searched, a number of letters were found upon him, which, it was stated, showed that he had only been a tool in the hands of some one else who wished to obtain the secret of their process. As he had pleaded guilty, and was willing to give up the letters, the firm did not wish to press the case, and would be content with the infliction of such a fine as the Bench thought suitable. The Stipendiary said if the letters had been found to contain any evidence of a conspiracy, he should have impounded them had the prisoner not given them up. Prisoner was discharged on payment of the costs, 3*l.* 5*s.* in all.

#### NEWCASTLE-UPON-TYNE.

**THE LEAD POISONING CASE.**—The inquiry as to the cause of the death of Mary Egan, lead worker, was concluded at Hebburn, on June 4, before Mr. John Graham, coroner. Dr. Inglis stated that a post-mortem examination of the body was made by him, assisted by Dr. Whammond and Dr. Nairn Lee, the result of which was to show that the cause of death was acute meningitis. The coroner said that in that case death was the result of natural causes. Dr. Inglis replied in the affirmative. Sir William Chaytor (Government Inspector): Then death was not due to lead poisoning. Dr. Inglis said it was not. He saw the deceased on the day before she was taken ill, she was then in good health, and passed the usual examination along with the other girls. After being taken ill deceased showed none of the symptoms of lead poisoning. Mr. Foster, a partner in the firm by whom the deceased was employed, said that the whole of the workpeople in the Tyne Lead Works were supplied with respirators, and the foremen had orders to see that the rule requiring respirators to be worn was enforced. Any violation of this rule was punished by dismissal. The jury then returned a verdict in accordance with the medical evidence, and the proceedings terminated.

#### PLYMOUTH.

**WILLIAM PEARCE** (aged fourteen) and **Albert Pardew** (aged fourteen) were charged at the Police Court on Tuesday with stealing 3*l.* 1*s.* 6*d.* and nine penny postage stamps from Mr. J. W. Filmer, chemist and druggist, 26 King Street, on June 6. From the evidence of Mr. Filmer, junior, it appeared that the youngsters had broken into the shop between Saturday night and Sunday morning, and abstracted the money from a desk which they forced open. They did not take any medicine, but broke a bottle of an expensive preparation which was on the desk. Both lads had been errand boys with Mr. Filmer. They pleaded guilty, and were each ordered to receive twelve strokes of the birch rod.

#### SOUTHAMPTON.

**AN ASSISTANT'S CLAIM.**—**JOSEPH SMITH v. THE SOUTHAMPTON DRUG COMPANY, LIMITED.**—This case was heard at the County Court on Tuesday, June 8. Plaintiff, a chemist, for whom Mr. Guy appeared, claimed 6*l.* 8*s.* 2*d.*, balance of account for one month's salary. Mr. Bell appeared for the defendants, who had paid 3*l.* 1*s.* 3*d.* into court. Plaintiff, a qualified chemist, said he was engaged by the company as a front counterman. He produced his certificate of registry, and his Honour asked what the defence was. Mr. Bell said that plaintiff exhibited not only incompetency but persistent laziness. In answer to Mr. Bell, plaintiff produced a list of duties he had to perform, and said he performed them to the best of his ability, and, he believed, efficiently. He entered into the service in March, but did not get largely in arrears



with his work—it was in arrears when he went there. Mr. Montgomery was put to witness's counter, but not to get up his arrears, but because the firm sent him to the dispensary, and he went there to oblige them. He was given a month's notice in April, not because he was lazy and slow, but Mr. Dickson told him he was perhaps a little too good for them, and would do better in a higher class of business. Mr. Bell said he was not much of a chemist, but he thought it unlikely that an employer would give his servant notice to leave because he was too good a man. Rhubarb and magnesia were rhubarb and magnesia all the world over. In answer to Mr. Guy, plaintiff said he took 55*l.* 1*s.* over the counter in nine days; that, he thought, did not show he was inefficient. Mr. William John White, a chemist and druggist, in the same service, said he did not notice anything inefficient in the way plaintiff discharged his duties. Mr. Bell, in defence, called Mr. Dickson, one of the firm, who said plaintiff neglected to keep up preparations for stock; he also neglected to do dusting in the morning, and witness had reason to complain to him several times. On April 5 they removed him to the dispensary, thinking the work there would be more congenial to him, but he did his work there even worse than he did at the counter. He also erroneously dispensed a prescription. Mr. Guy: Slips will happen. Why did you not sack him at once—that's the whole question? Witness said plaintiff added water to a prescription without authority, and priced some wrongly. Plaintiff said the water was put within the discretion of the dispenser. Witness added that on April 22 he gave him notice, but told him it would be for less than a month if he did not improve. He was paid up to April 30, and left on May 11, refusing eleven days' salary which had been tendered him. Mr. Day gave some corroborative testimony, saying that both he and Mr. Dickson complained to plaintiff of getting behind with his work. Mr. Guy asked the witness what he was—was he a chemist or a grocer? Witness replied neither; he was secretary of the Company. Mr. Montgomery, an assistant, said he took plaintiff's duty and got through it, but it kept him pretty busy. His Honour asked Mr. Bell where his defence was. Mr. Bell replied that if his Honour did not see it, it was not much use to point it out to him. Plaintiff habitually neglected his duties, and his work got behind, but it was afterwards easily performed by a younger man. His Honour said the plaintiff had a task, as was shown by the list, as long as a coachman's whip to perform every day. There was no allegation of incompetency, but they merely complained he was not fast enough for them. It was quite possible that one man might do it faster than he did. He gave a verdict for plaintiff, with costs.

#### STONEHOUSE.

**HERBALIST AND PREACHER.**—On Friday last the creditors of Mr. Roland Kiley, herbalist, Union Street, met for the first time in the office of the Official Receiver (Mr. J. Greenaway). The bankrupt, in addition to carrying on business as a herbalist and lecturer on phrenology, had acquired a considerable reputation as an Evangelical preacher. All his debts appear to have been contracted in the latter occupation. In Exeter Street a meeting-house was recently built for him, and this he had mortgaged to the extent of 2,200*l.*, and the other debts amounted to 900*l.* nearly. The majority of the creditors are persons in humble positions, many of them members of the bankrupt's congregation, from whom he borrowed money on notes of hand, most of which were improperly stamped. There are other questionable dealings in connection with Mr. Kiley, and meanwhile he has gone on a sea-voyage, but to what destination has not transpired.

#### SCOTLAND.

##### ABERDEEN.

**LAUDANUM THE COMFORTER.**—On Saturday, May 29, Phoebe Butler was in the company of a medical student in Union Street, and, a quarrel having sprung up, the young lady soundly thrashed her escorter with her umbrella in presence of a crowd which had gathered. Then she went home, swallowed a large dose of laudanum, and laid down to die. But a few doctors and emetics having intervened, Miss Butler returned to this world of tears, and still keeps her umbrella.

#### EDINBURGH.

**THE BRANCH AND THE COUNCIL.**—The Committee which has been in existence since the meeting of Scottish chemists held in 5 St. Andrew Square, on March 10, held a meeting on Tuesday last, which, on the convening post-card, was called the "final." The proceedings, we believe, were of a formal nature. The exertions of this Committee have been attended with good results. Although they had produced no other effect than an increased interest in the affairs of the Society, they would yet have been deserving of recognition. The Committee's influence was distinctly perceptible in the recent election of members of Council.

The "pacific turn," to use Mr. Schacht's words, which was taken in regard to the Scottish question at last Council meeting is a source of much satisfaction here. It is to be hoped that the negotiations which are in prospect will be carried on in an amicable spirit. Both sides may have to give and take a little. They have so far kept too much aloof from each other since the difficulty arose. If a genuine desire for the settlement of the question in the way best calculated to advance the interests of the Society animate both parties, there should not be much difficulty in arranging a line of procedure which shall lead to this.

A number of Scottish chemists who were disposed to support the Council in regard to the by-law had their sympathies chilled by the somewhat arbitrary manner in which the late Council of the North British Branch was disposed of. They recognised as reasonable what the Council proposed to do, but they objected to the way in which they set about doing it. There was no room for the advocacy of Mr. Richardson for "more kind treatment of the Scottish members."

We have heard numerous expressions of approval of the appearance which our new representative made at his first Council meeting on June 2. His position was a somewhat delicate one, but in tact and judgment he was equal to the occasion.

### Pharmaceutical Society of Ireland.

**T**HE monthly meeting of the Council was held on June 2, present, the PRESIDENT, Mr. J. E. BRUNKER, M.A., in the chair, the Vice-President (Mr. Draper), Professor Tichborne, Messrs. Grindley, Beggs, Sir George Owens, Simpson, Wells, Doran, and Hayes.

THE REGISTRAR read a letter from the Medical Board of Sir Patrick Dun's Hospital, acknowledging the letter from the Registrar, and stating in reply that the Board recognised the appointment of their dispenser as that of a gentleman competent to act as a compounder in virtue of his holding the certificate of qualified assistant of the Apothecaries' Hall. The medical staff do not sanction and have never sanctioned the issuing of certificates in pharmacy by their present compounder.

SIR GEORGE OWENS: That did not go to the Governors at all, but only to the Medical Board.

PRESIDENT: The appointment was made by the Medical Board, and I have heard that they look on this gentleman not as dispenser to the hospital, but only as assistant to the medical staff.

VICE-PRESIDENT: Can the Medical Board of Sir Patrick Dun's Hospital appoint their own dispenser?

PRESIDENT: It appears they can appoint anyone they like, they themselves being responsible for the doing of the work. Their position as a private institution is different from that of public institutions; and what we desired to do was to put before them the advisability of complying with the spirit of the law relating to public institutions.

A letter was read from Mr. F. W. Hutton, 12 Hardwicke Street, Dublin, asking the Council to accept a course of lectures taken out in the Westminster College of Chemistry and Pharmacy, London, in lieu of the three months, as required in Ireland.

PRESIDENT: The college to which he refers is not on the list of those authorised by the Privy Council, so that we cannot accept the course to which he refers.



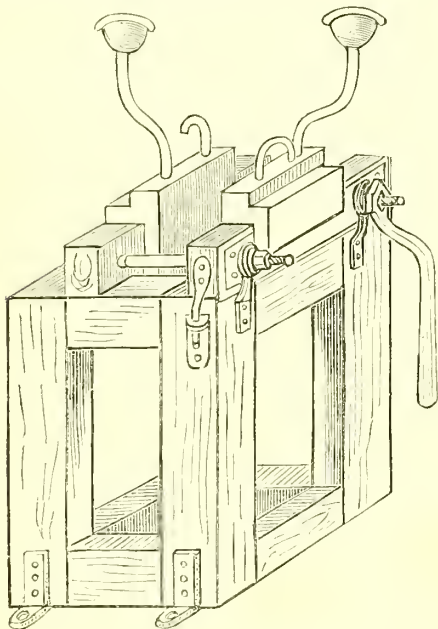
LECTURES ON GALENIC PHARMACY BY EMERITUS  
PROFESSOR REDWOOD.

LECTURE II.

BEFORE commencing his lecture the Professor read a post-card from a correspondent in the country, stating that there was a provincial establishment which had retained the practice of selling home-powdered rhubarb up to the present time. It may be remarked that it is impossible to compete with the wholesale drug-grinder in respect to fineness and colour. The later practice at Godfrey's was to powder one half by means of the pestle and mortar, and to send the remainder to the mill. A sort of speciality in the article was thus maintained.

*Extraction of Juices from Fresh Plants (continued).*

3. The vegetable substance must be first crushed or bruised. On the small scale this was shown by pounding hemlock leaves and young branches in a wedgewood mortar, which, for experimental purposes, replaced the stone mortar indicated in the Pharmacopœia. The Professor was of opinion that both the leaf and young shoots were equally efficacious. The mass, tied up in a calico bag, was transferred to a press working laterally, not with downward pressure. The following is an illustration of the apparatus.



It will be seen that each compressing side is provided with a reservoir capable of being filled from above with hot water drawn off by a curved waste-pipe. The machine is specially of service in all cases where an increase of temperature is desirable.

The Professor then collected some of the juice, and specimens so prepared were exhibited.

On the large scale the process is effected by edge-runners, an expedient being adopted for preventing the edge-stones from pressing with their full weight on the bed of the mill. The juice thus obtained is preserved by the addition of a third of its volume of rectified spirit, by which chlorophyll and albumen are precipitated. The mixture is allowed to stand seven days, and must finally be filtered.

It was obvious, observed the lecturer, that, were the juice filtered immediately after the addition of the spirit, both the chlorophyll and albumen would abstract with them appreciable quantities of the active ingredients of the juice, as was evidenced by the comparatively colourless filtrate from the fresh juice to which spirit had been added.

Attention was directed to the distinct coloration of the specimens exhibited, which were:—*Succi belladonnae, conii, hyoseyami, scoparii, and taraxaci*. The official direction to "set aside for seven days, and filter," as before stated, is to allow time for the complete action of the rectified spirit.

*Green Extracts.*

The pharmacopœial process for green extracts is first to heat the juice gradually to 130° Fahr., in order, temporarily, to separate the chlorophyll, which is to be removed by means of a calico filter. The Professor believed, not only that a certain amount of albumen accompanied the chlorophyll at this stage, but that it was a variable quantity, depending partly on the length of time that the heat was continued. Should the temperature exceed 130° Fahr., a larger quantity of albumen would be separated, and this would affect the preservation of the finished extract.

It might very properly be asked what is the use of this chlorophyll; and why, having once been separated, should it be subsequently added? The exact nature of this substance is not yet definitely known. Many of its chemical characters have been ascertained, and it is known to be soluble in alcohol. Yet, as far as the Professor's experience went, there remained in the chlorophyll something which alcohol failed to dissolve. Its colour was extremely fugacious and liable to alteration, and we are not at liberty to reject a substance which might hold some essential constituent.

Secondly, it was directed to heat the strained liquor to the higher temperature of 200° Fahr. This is to coagulate and permanently remove the albumen remaining in the liquid after the first coagulation. The filtered liquid is to be evaporated by a water-bath to the consistence of a thin syrup, and the green colouring-matter added by passing through a hair sieve. The water-bath is an apparatus by means of which water or its vapour at a temperature not exceeding 212° Fahr. is applied to the outer surface of a vessel containing the substance to be heated. The heat inside the vessel is always below 212°. In the steam-bath the vapour of water at a temperature above 212°, but not exceeding 230°, is similarly applied.

It was distinctly laid down that the filtrate previous to the addition of the chlorophyll was to be evaporated to the consistence of a thin syrup by means of the water-bath; afterwards evaporation was to be continued at a temperature not exceeding 140° Fahr. In making green extracts, therefore, attention to temperature is indispensable.

The form of pan also has an influence on the result. By attempting to evaporate expeditiously in a shallow metallic pan at a temperature between 140°–150° Fahr., the green colour is destroyed, but the same extract evaporated in an ordinary deep pan retains its colour.

The green colouring-matter is passed through a sieve, while being added, in order to secure equal distribution. Granules or masses of chlorophyll form starting-points for mould. This is more the case when a low temperature has been used for evaporation.

*Extracts containing the Albumen.*

It is a strange circumstance that, though albumen is officially ordered to be removed, owing to its promotion of the growth of mould, there is a method by which the whole of the albumen is retained to the decided advantage of the preservation of the extract. The juice is evaporated throughout at a temperature (say, 120° Fahr.) below that at which coagulation of albumen takes place. Shallow pans heated by contact with warm water, not steam, are employed, and the thin stratum of evaporating juice is constantly stirred.

Green extracts were at one time thus made by Messrs. Bell & Co., of Oxford Street. Such a mode produced extracts excellent in every respect, but it could not be adopted officially, as the process was too slow for the production of extracts on a large scale.

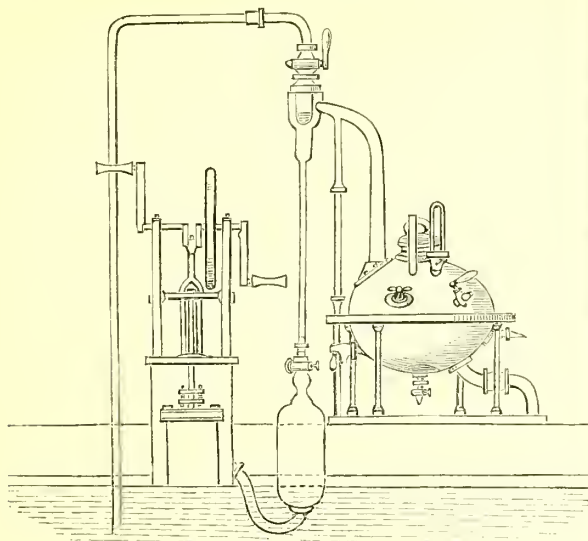
*Vacuum Pans.*

Admirable results had been obtained by the lecturer by preparing extracts *in vacuo*. He believed that he was the first pharmacist in this country who, some fifty years ago, applied the sugar-refiner's vacuum-pan for the preparation of pharmaceutical extracts.

To make the apparatus suitable, it would have to be materi-



ally modified. The Professor showed a diagram of such a pan, of which the following is a reduced drawing.



#### Root Juice Extracts.

Dandelion is an official root-juice extract. *Extractum Colchici* and *Extractum Colchici Aceticum* are both made from the inspissated juice of the corm. The process is in the main similar to that for making green extracts, but the temperature is different. The vegetable substance is to be crushed, and the juice pressed out; the feculence allowed to subside, and the clear liquor heated to  $212^{\circ}$ , to coagulate albumen, which is to be removed by straining through flannel. The strained liquid is then evaporated to the desired consistence at a temperature not exceeding  $160^{\circ}$  Fahr. In making *Extractum Taraxaci* the clear liquor is kept at  $212^{\circ}$  for ten minutes before being strained and evaporated.

These instructions have been advisedly and wisely given, and, in concluding, the Professor said that it might be a satisfaction to those present to know that these processes were founded on experiments made many years ago by a committee appointed by the Council of the Pharmaceutical Society, and he had himself taken an active part in the work.

#### ADELAIDE JUBILEE INTERNATIONAL EXHIBITION.

As already intimated (page 130), South Australia will attain its fiftieth year as a colony on December 28 of this year, and to mark the event it is proposed to hold an International Exhibition in Adelaide. The promoters have happily determined to open the exhibition on June 20, 1887, on which day Her Majesty completes the fiftieth year of her reign. The exhibition buildings will be erected on the Adelaide Park Lands, granted for the purpose by Parliament, which also aids materially with money grants.

The following are the departments which are more particularly interesting to our readers:—

#### DEPARTMENT II.—MANUFACTURES.

##### Section A.—Chemical Manufactures.

Class 200. Chemicals—pharmaceutical preparations. Mineral acids, and the methods of manufacture. Sulphuric, nitric, and hydrochloric acids.

The common commercial alkalies—potash, soda, and ammonia, with their carbonates.

Salt and its production. Salt from deposits—native salt, salt by solar evaporation from seawater. Salt by evaporation from water of saline springs or wells. Rock salt. Ground and table salt.

Class 200—cont.—Bleaching powders and chloride of lime; disinfectants.

Yeast powders, baking-powders, and self-raising flour.

Class 201. Oils from mineral, animal, and vegetable sources. Refined petroleum, benzine, naphtha, and other products of the manufacture.

Oils from various seeds, refined, and of various degrees of purity—olive oil, cotton-seed oil, palm oil, &c. Animal oils, of various kinds, in their refined state.

Oils prepared for special purposes besides lighting and for food. Lubricating oils.

Soap and detergent preparations; candles, stearine, glycerine, paraffin, &c.; spermaceti.

Illuminating and other gases and their manufacture; oxygen gas, and its application for heating, lighting, metallurgy, and as a remedial agent.

Class 202. Chlorine and carbonic acid.

Class 203. Paints, pigments, dyes, colours, turpentine, varnishes, blacking.

Class 204. Flavouring extracts, essences, perfumery, pomades, cosmetics.

##### Section C.—Glass and Glassware.

Class 215. Chemical and pharmaceutical glassware, vials, bottles, &c.

##### Section K.—Medicine, Surgery, Prothesis.

Class 283. Medicines—official (in any authoritative Pharmacopœia) articles of the materia medica, preparations unoffical.

Class 284. Dietetic preparations, as beef extract, and other articles intended specially for the sick.

Class 285. Pharmaceutical apparatus.

Class 286. Instruments for physical diagnosis—clinical thermometers, stethoscopes, ophthalmoscopes, &c.

Class 287. Surgical instruments and appliances, with dressings, apparatus for deformities, prothesis, obstetrical instruments.

Class 288. Dental instruments and appliances.

Class 289. Vehicles and appliances for the transportation of the sick and wounded during peace and war, on shore or at sea.

#### DEPARTMENT III.—EDUCATION AND SCIENCE.

##### Section B.—Scientific and Philosophical Instruments and Methods.

Class 358. Includes thermometers, barometers, &c.

Class 360. Weights, measures, and weighing apparatus.

Class 362. Optical and thermotic instruments and apparatus.

#### DEPARTMENT VI.—AGRICULTURE.

##### Section B.—Agricultural Products.

Class 614. Tobacco, hops, tea, coffee, spices, herbs, condiments, &c.

Class 615. Seeds and seed vessels.

Class 616. Oil, scent, and medicinal plants.

##### Section F.—Animal Products.

Class 637. Includes stearine, glycerine, lard, &c.

Class 638. Animal perfumes: as musk, civet, ambergris.

Class 639. Sponges, seaweeds, and other marine growths used in the arts.

Class 640. Beeswax, shellac, cochineal, and other insect secretions.

The arrangements for judging and awarding diplomas are based on a very equitable arrangement. The awards will consist of (1) diploma of first order of merit and medal, (2) diploma of second order of merit, and (3) diploma of third order of merit. Sir Samuel Davenport is the Executive Commissioner.

Pending the appointment of a commission in London, information concerning the exhibition may be obtained from Mr. Scott, South Australian Court, Colonial and Indian Exhibition, South Kensington, and afterwards on application to the Secretary, Adelaide Jubilee International Exhibition, Adelaide, South Australia.



## POST-CARD COMPETITION.—No. 3.

## MEDICINE VERSES.

Nor less than two hundred and twenty-five verses have been sent in competition for the guinea prize we offered on May 15 for "the best verse of four lines suitable for the advertisement of any pill, powder, mixture, liniment, or other medicine, proprietary or otherwise, usually sold by chemists." As a rule competitors have kept well within the conditions laid down; but not invariably. Four cards, for instance, are devoted to the glorification of Pears's Soap, and J. D. has strained the conditions as well as his muse in suggesting the following as suitable for an advertisement:

Two pairs of rhymes I send to gain  
The "Guinea prize," I hope,  
And so for once my muse I strain  
In praise of Pears's soap.

Nor can Mrs. Allen's Hair Restorer be strictly regarded as a medicine, a decision which shuts out the contribution of "W. C. T."

In rich profusion hung her tresses,  
Playthings for a proud adorer.  
Admired and envied, how she blesses  
"Mrs. Allen's Hair Restorer."

"The Erring Boy," too, has chosen an unfortunate subject for his laconic attempt:

Fleas bite  
And leave bumps;  
Keating quite  
Stops their jumps.

Nor would even the Board of Inland Revenue regard as "medicines" the substances glorified in the verses contributed respectively by "J. A." and "H. E."

We hear of nectars as a drink divine,  
But it is not quite in mortals' line;  
But here's a beverage that will in truth  
Both cheer us and renew our youth.

That Montserrat is grand is the voice of the land,  
The public demand it, the British navy command it,  
Its cordials are many and include the strawberry,  
Its sance is very tasty and makes cold meat a dainty.

The last quoted halts somewhat in the way of rhyme, but "A. G." disregards such trammels altogether. He says:

Eucynimin, a new-found drug,  
Cure for bilious headaches,  
You only need to try it once,  
To find out why we praise it.

While on the subject of rhyme we may quote one which strikes us as more ingenious than happy. It runs:—

It is the best to cure a cold  
Or cough, bronchitis, influenza,  
In man or woman, young or old,  
And then, 'tis only thirteen pence a Bottle.

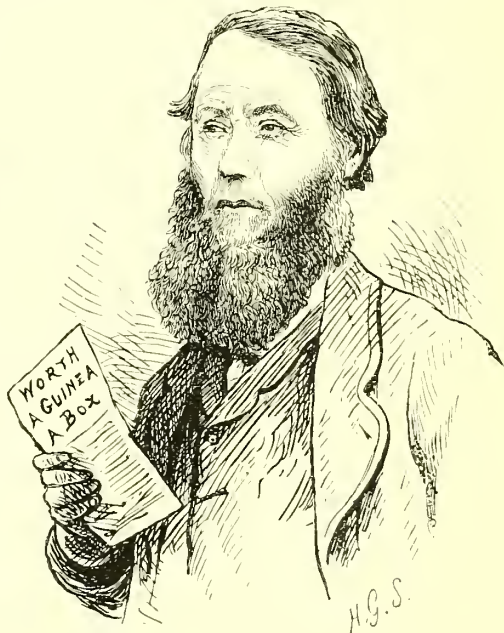
"G. P." throws off in quite Byronian style, but the four-line limit does not permit him to reach the point where the recommendation of the pill comes in:

The liver in rebellion gloats in gloom,  
Forebodings fearsome wait on direful doom,  
Ills real and ill's imagined hedge us round,  
And life,—of empty hopes is empty sound.

Nor can "E. T." be congratulated on the production of a verse suitable for the advertisement of a medicine in the following:

If half we see now advertised  
At its true value could be prized,  
The "mixture," "lotion," "powder," "pill"  
Would be set down as simply "nil."

By far the most popular medicine among the "poets" would seem to be Beecham's Pills. These have inspired eighteen hymns of praise, a fact which we think justifies us in pre-empting, as we do on this occasion, a sketch of their prosperous inventor. Mr. Beecham, who is one of the most enterprising of modern adventurers, has spent a good many years in the effort to induce the world to have the same faith in his pills which he himself always possessed; and he now indulges in the costly business of agriculture in Buckingham-



shire, while still exercising a controlling influence over his business at St. Helens.

Next to Beecham's pills in point of number come ten contributions in honour of St. Jacobs Oil, seven each for Cockle's Pills and Eno's Fruit Salt, four each for Pears's Soap and Vaseline, three each for Menthol Cones, Clarke's B 41 Pills, Parr's Pills, and Woodcock's Pills. Holloway's Ointment, Lamplough's Saline, and Keating's Insect Powder are honoured twice each; and we have received a verse each in recognition of the merits of Mrs. Allen's Hair Restorer, Bunter's Nervine, Brand's Essence, Brandreth's Pills, Brown's Troches, Clarke's Blood Mixture, Coffin's Indian Pills, Davis's Pain Killer, Elliman's Embrocation, Gordon's Extract, Hop Bitters, Holloway's Pills, Kalydor, Kay's Coaguline, Keating's Lozenges, Montserrat Lime Juice, McK. & R. Pills, Mexican Hair Renewer, Powell's Balsam, Pepper's Tonic, Siegel's Syrup, Snooks's Pills, Warner's Safe Cure, and Mrs. Winslow's Syrup. Besides these there are numerous verses composed in reference to preparations of merely local fame, some on apparently imagined products, and a few concerning stock medicines. Among the latter, blue pill and black draught, bromide of potassium, diachylon, Epsom salts, eucalyptus oil, eucynimin, ipecacuanha, pepsine, and quinine are poeticised.

We would gladly print most of these, but the inexorable laws of space shut out the majority. Those we print will serve as specimens of the various styles and qualities.

The selection of the prize-verse was not an easy task. By a process of disintegration the possible winners were gradually reduced until two only remained for rejection. Our staff of critics found it impossible to agree as to the relative merits of these poems, and we ultimately resolved the difficulty by awarding a guinea to each competitor. The prize verses are indicated below by being enclosed in frames; the names of the writers are

MR. C. C. BELL, Epworth,

and

MR. H. HERBERT,

care of Messrs. Burgess, Willows & Francis, Holborn.



Of all the drugs our shops contain  
For curing every ache and pain,  
There's one we sell which has no faults,  
Its action's sure. 'Tis Epsom salts.

J. D.

For hard or soft corns try Celandine,  
Relief you will find I am sure,  
For to thousands I know it has been  
Not only relief, but a cure.

J. T.

Neuralgia is my greatest foe,  
It makes me quite worn-out and faint;  
I will this day to Fuller's go  
For some of his Neuralgic Paint.

H. E. F.

CONVALESCENT HOMES FOR HORSES.

[A movement is on foot for providing the  
above for horses belonging to poor persons, in  
cases where a short cessation from work is con-  
sidered likely to prevent temporary lameness  
from becoming permanent.—*Vide public press.*]

A noble scheme their sufferings to avert!  
But stay! a better I can here insert;  
Reduce the need for homes of convalescence  
By a judicious use of Bird's Botanic Essence.

E. H. S.

Take, O Sick One, pills of Beecham,  
He's the only one to teach 'em  
How the power of drugs can reach 'em.  
Happy, philanthropic Beecham!

R. W. C.

When thou canst count the glittering stars  
That nightly deck the sky,  
Or reckon up the grains of sand that round the  
ocean lie,  
Then thou mayst hope by skill sublime, or else  
divinely taught,  
To calculate the good to man Brown's Bronchial  
Mixture brought.

R. E. B.

Hark! the Herald Angels sing,  
"Cockle's pills are just the thing—  
Peace on earth and mercy mild;  
Two for a man and one for a child."

H. C. G.

Oh, happy he whose path is plain,  
Who can his feet control,  
"Knows whence my 'solvent' to obtain  
When corns distress his sole!"

T. W. E.

Mary had a little congh  
Which troubled her at night,  
Took some Powell's Balsam,  
Quickly set her right.

C. F. S.

When you eat too much dinner or drink too  
much wine,  
The best cure is Lamplough's Pyretic Saline;  
In the morning a dose should be taken first  
thing,  
In a glass of cold water fresh from the spring.

J. T.

He felt very ill, and wished he was well,  
He took Beecham's pills, now he's sound as a  
bell;  
He calls on his friends and tries hard to teach  
'em

Whenever they're ill to take pills made by  
Beecham.

C. F. S.

John Little wore a thriving corn upon his little  
toe;  
He pared a little now and then, but still that  
corn *would* grow;  
He bought a box of Alcock's Shields (a little  
box, to try),  
And in a little while that corn to Little said  
good-bye.

A. W.

Let Devon's lovely valleys,  
Let Scotland's rugged hills,  
Let London's slums and alleys  
Sing praise to Beecham's Pills.

W. L. G.

The corn had been painted with Osborne's Corn  
Cure,  
Which Arthur to Florence conveyed;  
The desired relief has proved to be sure,  
For the corn that was painted is dead.

W. H. G.

HERBAL DINNER PILL.

Three rarest herbs of sovereign power are  
here

By art enclosed in tiny argent sphere;  
Three-fold the effect, ease, pleasure,  
health, combine,  
And pale dyspeptics, chuekling, dare to  
dine.

C. C. B.

SMITH'S CERTAIN CORN CURE.

Fiction o'er fact prevails on posters gay,  
Fact over fiction in a quieter way.  
An honest fame ensures an honest sale,  
A cure that cures, by curing tells its tale.

F. W.

If I had a bunion, or, what is worse, a corn,  
I wouldn't cry, "Oh! that I ue'er had been born;"  
Turner's Seven Days Corn Cure would end all  
my woes;

I'd send for a bottle and cure my poor toes.

E. A. T.

Depressed and sad, worn out with care,  
The toils of life too hard to bear;  
Who suffers thus should bear in mind  
There's help for all in Phosphodyne.

T. A.

The tablespoon and the mixture are  
Too large for the vest pocket,  
But the mercurial pills from McK. & R.  
Are carried, sometimes, in a locket.

W. J. C.

And is the loveliest and dearest gone?  
Must the cold earth enclose that beauteous  
clay?

Oh, had she but of Barberry Bitters known,  
And taken it, she had been well to-day.

H. A. C.

Achilles, if he'd only seen  
My patent corn cure Hederine,  
Would sure have had the sense to feel  
Inclined to try it for his heel.

E. T.

When corns and warts and bunions all  
Are buried 'neath the churchyard wall,  
Upon their tombstone will be seen,  
"We died through use of Hederine."

W. H. W. P.

Angelina, gently sighing, softly stole to Edwin's  
side,  
Waking him from peaceful slumber; "Darling,  
do get up," she cried;  
"Baby is so very fretty. Go and ring up Mr.  
Chirrup  
(Stores are closed) and get a hottle Mrs. Wins-  
low's Soothing Syrup."

B. P.

Despite the years that silently glide o'er her  
Her charms are unimpaired, her locks unfold  
In all their rich luxuriance of gold,  
For now she uses Shaw's Famed Hair Restorer.

J. H. W.

Most physic you take is nauseous or thick,  
And though it relieves you it makes you feel  
sick;  
But if you feel seedy, and want no emetic,  
Invest in a bottle of Lamplough's Pyretic.

R. W. C.

My wife (who's a seold) had a terrible cold,  
There was comfort at home whilst she  
hardly could speak;  
Of the Troches of Brown she a box  
swallowed down,  
And never ceased "nagging" the whole  
of the week.

H. H.

This is the medicine that will soon make you  
well,  
Of its wonderful virtues vast numbers could tell,  
It will set you all right in a couple of jiffies,  
The price is one and three ha'pence, which not  
very stiff is.

C. F. S.

Crowds of labourers thickly clustered in the  
country market place,  
Where a venerable stranger, with a kind and  
handsome face,  
Loud proclaimed, with earnest manner, "Be it  
known, ye sons of toil,  
Nothing's found to cure rheumatics like St.  
Jacobs Wondrous Oil."

H. H.

Sick unto death our darling daughter lay,  
No hope remaining, we could only pray;  
A ministering angel, in her soft white hand,  
Brought life and health in Essence made by  
Brand.

M. H.

When e'er I press those lips of thine,  
So rosy, soft, and pure, and sweet,  
I feel that of all things divine,  
French Lip Salve is the greatest treat.

F. C. C.

When your liver's out of order, and you suffer  
from depression,  
Never be without a box of Cockle's pills in your  
possession;  
If you're out of sorts, and do not wish to run up  
doctors' bills,  
You should have recourse at once to Cockle's  
Antibilious Pills.

J. T.

Should a horrible fang cause you a pang,  
And drive you almost to distraction,  
Try a Menthol Cone, 'twill ease the bad bone,  
And save you the pain of extraction.

E. C.

In a rhyme of four lines I can hardly find space  
To speak of a boon to the whole human race,  
'Tis known by the name of Eno's Fruit Salt;  
Much more would I say, but now I must halt.

J. C. K.

Oh! tripp'd ye last eve to the sound of sweet  
music?  
Refresh'd ye with ice and champagne?  
Then take Eno's Fruit Salt, if these have made  
you sick,  
'Twill make you yourself feel again.

A. L. M.

If long you would live and be free from Life's  
ills,  
Take a dose now and then of Beecham's good  
pills;  
Though worth guinea a box, if you have but a  
shilling  
Most chemists to serve you, I am sure, would be  
willing.

A. W. S.

CITY AND SUBURBAN, 1886: A REMINISCENCE.

When Royal Hampton just beat Highland Chief  
We soon became as "groggy" as the winner:  
From Eno's Salt we quickly found relief,  
And, home returning, much enjoyed our  
dinner.

B. O' F.



Whence those rose-tipped cheeks and flushes  
On that alabaster throne?  
Kalydor, with maiden's blushes,  
Claims the painting all her own.

W. C. T.

Tho' "out of sorts" with many an ache,  
Tho' all my limbs like palsy shake,  
Tho' every nerve be racked with torturing pain,  
Give me but Eno's Salt and I'll not complain.

T. A.

What agony we suffer, oh, what pain,  
Night after night, from tooth-ache we endure,  
When we from any chemist can obtain  
Bunter's Nervine, the famous instant cure.

J. T.

FOR AN ANTIBILIOUS PILL.

This famous antibilious pill  
Requires no ads. to till it;  
Being anti-bilious, why, 'twere ill  
To spoil its name and bill it.

T. D. L.

W. E. G.'s LAST CHANCE.

(Received too late for competition.)

The statesman tore his scanty locks, and cried,  
In accents hoarse,  
"Oh that my followers were once more as they  
have always been!  
Tell me, ye gods, can aught unite my party's  
shattered force?"  
In tones sublime great Jove replied, "Try  
Kay's Coaguline!"

E. R. P.

There was a young lady at Brighton,  
Who when coughing her parents did frighten;  
She had tried morphia, ipecac, poppies, and  
squills,  
But nothing relieved her like Beecham's Cough  
Pills.

C.

Who in the path of dark Dyspepsia tread,  
Whose bosoms she with woe expectant fills,  
Need fear no longer, if with daily bread  
Is swallowed one of my Digestive Pills.

T. W. E.

When bile your blood fills, a dose of Blue Pills  
Is really a wonderful cure;  
If not quite vis sula, a dose of Black Stuff  
In the morn will its work ensure.

S. McK.

"My powders they are nice, won't you try them,  
Mrs. Price?  
They will cure all your children of their teeth-  
ings. Oh, how nice!"  
"Ah! will they, Wilson? Well, I'll try them  
and see how nice  
They do for my children; then I'll be ready to  
give you your price."

J. W.

The old man said, "Thro' many years of toil  
To cure sciatica I've sought in vain,  
But since I've tried your Eucalyptus Oil  
It's magic power has charmed away my pain."

H. A. C.

When Science, closely hunted, turns to bay,  
Revealing mockingly the foes unseen,  
Woe her but gently, and she points the way  
To triumph still by Duncan's Carboline.

J. R. J.

Thro' all my life, dies et nox,  
New remedies I'll shun,  
While 4/6 will buy a box  
Of Clarke's B. 41.

P. N.

Of hydrocarbons we've our choice,  
Besides, we've Lanoline;  
But if I raise my humble voice,  
I'll speak for Vaseline.

A. B.

I took two to myself, and gave two to my  
brother,  
And to Biddy, my wife, I gave her another;  
And troth it is thrue, divil a word of a lying,  
That Gladstone's famed pills saved us all from  
a-dying.

TEDDY O'BRIEN.

What joy the name of food instils  
In a dyspeptic's ear!  
For after taking E. Hall's Pills  
He eats it without fear.

A. G. S.

Who maketh the pills (name beginning with  
Bee)  
That are worth, every box, a whole golden  
guinee?  
If they'd sell for half that we should think it a  
speer;  
But the stores spoil the trade with their ten-  
pence ha'pence.

H. A. C.

After the feasting is over,  
After the wine bibbing's done,  
A couple of Marson's Digestives  
Will fill you with frolic and fun.

C. D. M.

People are cured of headaches vile,  
Of intermittent flows of bile,  
Of weakness and diseases chronic,  
By Simpson's Universal Tonic.

T. S.

Alone she sits, her cheeks are pale, her heavy  
eyelids pall her languid eyes;  
Her chest is racked with coughs and groans, her  
virgin breast with sighs.  
The scene is changed: a bright-eyed maiden  
goes with health upon her brow,  
And needs not she that well-known cure, called  
Bailey's Cough Specific, now.

J. J. L.

The sullen majesty of pain  
Arises, but to fall again,  
And must itself adorn the praise  
Of Ointment known as Holloway's.

H. F.

If from neuralgic agony  
You would be in a moment free,  
You must our liniment apply,  
The pain will in an instant fly.

J. A.

When eating cockles, should they disagree,  
In Cockle's Pills you'll find a remedy,  
Just take a few, and you'll get well instantler,  
"Similia similibus enrantur."

J. E.

'Tis Clarke contendeth in the strife;  
The blood, he says, it is the life;  
His mixture is the only cure  
For cleansing blood that is impure.

P. C.

For rheumatism, gout, lumbago, sprains,  
Sciatica, and all tormenting pains,  
Is there no remedy?—no mighty foil?  
There is!—the world-renowned St. Jacobs Oil.

R. O.

When by the cold east wind or water hard  
The hands are chapped, their beauty marred,  
There's nothing in the world, I ween,  
As good as Chesebrough's Vaseline.

F. G. C.

Robert Burns has sung of toothache—he must  
have had it very bad;  
Had he tried Macpherson's Mixture he would  
never have been sad;  
Side by side with Tam o' Shanter, we would  
have another tale,  
Praising up this famous mixture—only sixpence  
free by mail.

J. R. M.

A lady, passing by one day,  
I heard, in admiration, say,  
"I take, to cure me of my ills,  
Rhubarb and Dandelion Pills."

E. T.

Mortal man is born to sorrow,  
Full of wind and pains severe;  
Purging Pills, take two to-morrow,  
Then Old Parr you will revere.

A. H.

There lives now a chemist in Lonth,  
Who sends recipes east, north, and south;  
And chemists far west, if truth be express'd,  
Say Brooks' recipes are the best.

T. B.

Why suffer more, or murmur o'er  
Enormous doctors' bills?  
While mighty throngs, in grateful songs,  
Are praising Cockle's Pills.

W. L.

Beecham's Pills will cure the ills of every tribe  
and nation,  
No matter what may be their lot, no matter  
what their station.  
These simple pills save doctors' bills, you need  
no long prescription  
So when you're ill just take a pill, a pill of this  
description.

W. C. T.

When all seems sad and dark and dreary,  
When heart and frame alike are weary,  
When sick and sinking from life's ills,  
Try two of Headland's Liver Pills.

H. A. C.

O ye who are troubled with freckle or pimple  
And don't wish the freckle or pimple a fixture,  
Be assured that the cure's exceedingly simple,  
A few doses take of my famous Spring Mix-  
ture.

T. W. E.

This medicine you'll find so nicely compounded,  
That pain may in all its dread forms be cou-  
founded;  
The cost is so little, the effect is so sure,  
That each one who tries it may hope for a cure

W. P.

I come as a boon and a blessing to those  
Who've warts on their fingers or corns on their  
toes;  
Applied as directed, each night and each day,  
You will very soon find your troubles away.

J. F.

A glorious remedy without a doubt,  
Where'er your pain may be 'twill find it out;  
'Twill purify and cleanse, the health renew;  
Thousands have proved its worth, and so may  
you.

W. H. W.

For ache or pain, for bruise or strain,  
For hurt of all gradation,  
To chemist hie, and promptly buy  
Some Eiliman's Embrocation.

J. H. S.

A panacea for every ill,  
Our potent Antibilious Pill!  
This only asks those few to try them  
Who're not already swearing by them.

F. P.

Pastry, alas! as well its victims know,  
Is oft the source of much dyspeptic woe;  
'Tis therefore strange, but Providence so wills,  
The speediest cure for that is found in Pyman's  
(Pieman's) Pills.

E. H. S.



## THE GENERAL MEDICAL COUNCIL.

THE customary annual session of this body commenced on Tuesday the 1st inst., under the presidency of Sir Henry Acland, who, before he delivered his address, intimated that Sir Henry Pitman had resigned his appointment as member of the Council. In his address the President referred to the present state of medical legislation, and thought that the proposed enlargement of the Council would make it more fit to do its work. Referring to medical education and examination, and to the mode of conducting written examinations, the President rather deprecated the provision in the Government Bill for inspection of examinations. In speaking of education, he said that the machinery of medical education in London is about to undergo complete revision. The new buildings of the Royal Colleges, with their projected apparatus for education and examination, will, by aiding the unity and completeness of examination, aid the unity and completeness of teaching in the now numerous and separated schools of London. As the colleges in the old English universities have united in various ways for teaching purposes, so it is not impossible that the great medical schools may find an advantage in some form of union, both professional and tutorial. It is certain—and it is almost startling to say this—that some of the instruction given in London hospitals for the average learner is tenfold more detailed and more precise than in the student days of Hunter and of Brodie. He proceeded to say that ultimately there would be forced on the Council, in some form, the matter of “higher titles.” The old traditional notion is not yet exploded that the titles of Fellow or Doctor, howsoever obtained, imply distinction. “Is not the time now coming,” said the President, “when an educated public will know that it is not the name, but the body that gives the name, which sets a stamp of honour or of nullity?” The President concluded his address by referring to the death of Dr. Scott Orr, and to the proposed change in the constitution of the Council.

The rest of the first day's session was taken up by the appointment of committees, amongst which was one which is to prepare a summary of the reports of visitors of examinations.

On the second day, up till 2 P.M., the Council indulged in a discussion on a motion to make elementary mechanics of solids one of the subjects of preliminary examinations. At that hour the Council went into committee to consider two cases of proposed erasure, and on resuming it was agreed to remove from the Medical Register the names of the following, for the reasons stated:—

William Turnbull, L.S.A. Lon., 1854, M.R.C.S. Eng., 1859, convicted of manslaughter for attempted abortion, and sentenced to ten years' penal servitude.

Robert Thorburn, M.D. Edin., convicted of theft, and sentenced to six months' imprisonment.

Two other cases came under consideration. In one, that of Robert Locke Evans, the licensing body had removed his name from its register, and declined to tell the Council the reason why. This case gave the Council some trouble, and the opinion of counsel had been taken as to whether Mr. Evans's name could be removed from the Register.

The opinion given was that the removal could only be effected after the Council had been satisfied that the withdrawal of the qualifications by the licensing body had not been made in consequence of the adoption of any particular theory of medicine or surgery.

Dr. A. Smith produced a certificate to that effect from the licensing body, and moved: “That the qualifications of Licentiate in Medicine and Licentiate in Midwifery of the King and Queen's College of Physicians in Ireland, appended to the name of Robert Locke Evans in the Medical Register be removed by the registrar.” The motion was agreed to.

It was also agreed to remove from the Dentists' Register the name of Henry Partridge, Sussex House, Sussex Place, South Kensington, S.W., whose diploma in Dental Surgery, Royal College of Surgeons in Ireland, had been withdrawn, “because of his having, in violation of his undertaking given to the College, resorted to advertising in connection with the Ladies' Dental Institution, South Kensington.”

The rest of the day was devoted to the elementary mechanics' question.

At the third day's meeting the debate on elementary mechanics was resumed and advanced a stage. The only other matter of importance under consideration being certain communications regarding certificates in sanitary science, praying that the titles which they confer should be registrable. On Friday a resolution was arrived at regarding the preliminary examination, whereby a knowledge of elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics, will be required in future.

## THE NEW PHARMACOPOEIA.

At the same meeting Mr. Marshall moved, and Dr. Heron Watson seconded, that the following report of the Pharmacopœia Committee, signed by Dr. Quain as chairman, be received and entered on the minutes:

Dr. Attfield attended the Committee.

“The Committee report that a statement laid before them shows that, of the edition of 20,000 copies of the *Pharmacopœia* of 1885, about 19,000 copies have been disposed of. It will therefore be necessary to prepare for a re-issue of the work; and they recommend that the Executive Committee be authorised to take the necessary steps for the purpose.

“The Committee recommend that the *errata* contained on the slip issued with the first reprint of the *Pharmacopœia* be inserted in the text of the work, together with some further *errata* now submitted to and approved of by the Committee. They further recommend that the slips of *errata* be kept in stock for distribution to former purchasers of the work, and for insertion in the still unsold copies.

“With reference to the proposed annual report on such changes or additions as may be required in future publications connected with the *Pharmacopœia*, the Committee report that so short an interval has elapsed since the publication of the work that it will be undesirable to submit a report until next year. The Committee have remitted to the Subcommittee the duty of making the necessary arrangements for this purpose.

“Finally, the Committee report that the sum of 2,713*l.* 8*s.* 5*d.* has been expended on the production of the present edition of the *British Pharmacopœia*, and that the sum of 3,534*l.* 13*s.* 7*d.* has been received from the sale of the same, leaving a balance in favour of the work of 821*l.* 5*s.* 2*d.*”

On the following day, on the motion of Dr. Quain, the report was received and adopted, and in moving its reception Dr. Quain congratulated the Council on the fact that 19,000 copies of the *Pharmacopœia* had been sold, leaving a balance to the good of over 800*l.*

The rest of this day's sitting was devoted to the report of the Finance Committee, submitted by Dr. Quain. Various committee reports were received and discussed.

Dr. Quain also moved that Sir Dyce Duckworth be elected a member of the Pharmacopœia Committee in place of Sir Henry Pitman, which was agreed to. A special vote of thanks to Dr. Quain for his services to the Pharmacopœia Committee was moved by Mr. Simon, and carried with acclamation, the President expressing the Council's great appreciation of Dr. Quain's services.

## FRENCH CORRESPONDENCE.

(From our Special Correspondent.)

PASTEUR LOSES A ROUMANIAN PATIENT.—John Gagu, aged forty, a Roumanian farmer, who was bitten, on May 11, by a rabid dog, came on the 25th to Paris for treatment. On June 6 he showed the first symptoms of hydrophobia, and died the following day. As happened in almost all the cases ending fatally, the patient had been wounded in the head. The number of cases treated successfully keeps increasing, and so does the subscription list, which now comes up to 1,018,081*l.*, or nearly forty-one thousand pounds.

A NEW ALLOY OF ALUMINIUM.—M. Bourbouze, of the Paris College of Pharmacy, on June 7 presented to the Academy of Sciences a paper respecting a new alloy of aluminium which appears to possess valuable properties. The compound in question is made with ten parts of aluminium for one of tin, and while almost as light as aluminium—

sp. gr. 2.85 against 2.56—it has the advantage of being as easily soldered as common brass. It has otherwise the general properties of the principal component, namely, unchangeableness in the air, hardness, and brightness.

**TEMPORARY RETIREMENT OF M. CHATIN.**—The report of the Board of Inquiry has not been made public, and most likely will not be, but it has transpired that fault has been found with the Director for his neglect of the students' memorial monument. This had been erected in the old college building by public subscription of the students to the memory of five of their comrades killed during the June *émeutes*. On removing to the new buildings the stones were heaped, somewhat irreverently, in a backyard, where they have remained neglected ever since. Such want of respect was not the least of the grievances against M. Chatin. He is to take immediate steps to have the monument re-erected in the present Botanical Gardens attached to the College. He also requested the Minister to temporarily relieve him from delivering the lectures on botany, and suggested that M. Gérard, his *agrégé*, be appointed to take his place. An official order granting both requests has been issued, and the students declare themselves perfectly satisfied.

**SCENES AT THE RE-OPENING OF THE COLLEGE.**—On Monday, June 7, the gates were gaily opened at the proper time, the young men again crowded the halls as if nothing had happened, cheered all the professors at the lectures, and everything went on merrily. But the chief demonstration was expected for Tuesday, at the beginning of Professor Gérard's lectures. The new lecturer is comparatively a young man; his specialty is micrography, and on that account he had charge of the laboratories for the practical study of this subject at the college. He appears to be popular with the young men, for cheers upon cheers greeted him as he stepped behind the lecture table. In fact it was a real ovation, which no doubt had more than one meaning. At first the professor was somewhat nervous, this being his *début*, but after a neat little speech of thanks, and request for indulgence, he went on successfully with his lecture, was listened to most attentively, and heartily cheered and cheered again at the conclusion. So far as the College is concerned, the storm is over. During the temporary retirement of M. Chatin the affairs are in charge of Professor Milne-Edwards, who is very much respected. As to the unfortunate, Normand and Cristofani, their case is to be called on June 12 before the Correctional Tribunal.

M. LEPAGE (of Gisors), who died last May, aged 73, was a pharmacist well known for his scientific investigations and many pharmaceutical papers. He was president of the Pharmaceutical Society of the Eure, his department, and a corresponding member of the Academy of Medicine. He was M. Patrouillard's father-in-law.

#### PARIS PHARMACEUTICAL SOCIETY.

THE monthly meeting, postponed on account of the closing of the school, was held Wednesday, June 9, with a fair attendance of members, under the presidency of M. Prunier, assisted by M. Planchon, the secretary.

M. Planchon begged to be excused for having taken upon himself to postpone the June meeting, but the Ministerial order rendered such a step necessary. Owing to a like cause he had been unable in time to advise the members of an invitation sent by M. Patrouillard, that the society be represented at the funeral of his father-in-law, M. Lepage, who was a corresponding member of the Society.

M. Yvon brought up again the *quinine question*. He said that, having been requested to examine some foreign sulphate of quinine offered for home consumption, he had found it pharmaceutically impure, because it did not answer the requirements of the Codex, and yet it might have been said to be pure enough commercially. French quinine of good grade was found equally deficient when tried according to the Codex standard, which he thought was too loose in some of its terms. The French authority, substantially adopting Kerner's test, only directs to agitate the specimen with "warm" water. If this be done with water at 40° C., and the liquor be allowed to cool only for half an hour, according to official requirements, more quinine sulphate remains dissolved than would otherwise, and the test shows an im-

purity purely fictitious. He thought the Codex directions were too vague, and asked that a committee be named by the Society to examine the question.

In the discussion which followed, Messrs. Petit, Marquis, Wurtz, and others took a share, pointing out that Kerner had specified 15° C. as the requisite temperature, and relating their experience with the influence of a change of temperature while experimenting. To this M. Yvon pertinently answered, saying in substance that he was not fighting Kerner's test but that of the Codex. He gained his point, and later the President appointed Messrs. Yvon Guinochet, Jungfleisch, Marquis, and Wurtz a committee to investigate the subject and report accordingly.

M. Petit presented specimens of new chemicals lately discovered, namely, *toricafeine*, *metacafeine*, &c., merely adding he had prepared the series of them, and ascertained their melting-points and solubilities. The numbers were given, but could not be taken down accurately.

M. Marquis, on behalf of Pharmaciens-Major Simon, showed a model of a new adhesive plaster spreading machine, now used at the military hospital of the Val-de-Grâce.

M. Guinochet, also a military pharmacist, described analyses of various liquids, made by M. Strauss, a colleague, from cysts and ascites abscesses. He showed in them the presence of butyric derived from the milk diet of the patients, and M. Strauss demonstrated the existence of direct communication between the chyloferous vessels and the ascites.

M. Champigny read a communication from M. Benoit (of Joigny), a corresponding member, respecting a disease of the grape vine attributed by some to a vegetable parasite, and by others, M. Planchon among them, to an arachnid. The name of the disease is "erydeum" or "eryneum," and M. Benoit feels sure it is not due to the arachnid. On being interrogated by the Society, M. Planchon answered it was not he who was in cause, but his brother, now in Paris, whom he would consult, and at the coming meeting he would report on the subject.

The meeting concluded with the election of M. Giraud as a corresponding member.

#### Trade Notes.

THE Hop Bitters Company make a very resolute sort of announcement in our advertisement pages in reference to their title. We have invariably given to correspondents the advice now emphasised by the company, that no one has a right to take to himself a benefit from the demand for "hop bitters," which the company have popularised by a heavy expenditure.

**HENRY LAMPLOUGH (LIMITED).**—It is proposed to sell the business of Mr. Henry Lamplough, 113 Holborn, E.C., who, owing to advanced age, is desirous of retiring from active life; and, to replace some of the capital which he will withdraw, the business has been converted into a Joint Stock Company, with Mr. Cooper, the active manager of the firm, as managing director. It is stated that the business was established in 1707, and that it is of a very remunerative character, the net profits for three years having amounted to 45,215%. The capital required is 100,000*l.* in 5*l.* shares, and for the going concern, free of all liability, together with premises, trade-marks, &c., the vendor is to receive 44,000*l.*; payable 28,000*l.* in cash, and 16,000*l.* in shares or cash, at the option of the directors, who are James Inch, Esq. (Messrs. Maynard, Harris & Co., East India agents), 126 and 127 Leadenhall Street, E.C., Alexander Brown, Esq., banker, 79 Lombard Street, E.C., J. W. Cooper, Esq., managing director, and Mr. Lamplough, who will join the Board after allotment. The shareholders will nominate one additional director. The first subscribers are:—J. T. Hillside, stationer, Sumatra Road, West Hampstead; W. C. Wray, agent, 95 Grosvenor Park, Camberwell; W. N. Tucker, commercial traveller, 34 Talma Road, Brixton; W. de B. Seagram, accountant, 37 Cofe Road, Forest Hill; J. Henderson, journalist, 53 Romola Road, Ilern Hill; A. Elson, Aneona House, Aneona Road, Highbury; W. H. Fielding, 91 Wakehurst Road, Wandsworth—all one share each.



## THE PAST OF PHARMACY.\*

THE first drugs were naturally those of vegetable origin. Many of the lower animals have been known to select certain plants and consume them for their medicinal effect; and man with that reason which is so much loftier than instinct, long before the botanical explorations of Aristotle, Theophrastus, Gesner, or Linneus, also selected certain plants for specific diseases. Amongst the very earliest plants used were cassia, hellebore, the fig, the vine, flax, garlic, and a species of bulbous plant which Pereira considered may have been squilla. This latter plant was worshipped at one time by the Egyptians, who erected a temple in its honour. The knowledge of the first medicinal plants was confined to a comparative few, and these professors sought, by ghostly injunction and mystification of the patient, to add to their effectiveness. Amongst the external applications used about 2000 B.C. were, the slime of the Nile and friction in rheumatism, carbonate of soda (probably), salt, alum, plasters, unguents, white lead, and verdigris. As civilisation advanced disease unfortunately increased, and the number of remedies multiplied. Æsculapius, about 1263 B.C., with an increased *materia medica*, used potions and incisions, with the ever indispensable amulets, incantations, or charms. One of the sons of Æsculapius, Podalirius, practised venesection. Homer, about 907 B.C., mentions papaver somniferum, and sulphur fumigations. Hippocrates, about 400 B.C., according to Alston, refers in his works to about 36 mineral, 300 vegetable, and 150 animal substances. Heracides, about 230 B.C., employed conium, opium, and hyoscyamus. Themison, about 100 B.C., had recourse to leeches, and in A.D. 54 Alston tells us that Galen gives the names of 540 plants, 180 animal and 100 vegetable substances.

Nor were the early drugs always of a material nature, but frequently were of a spiritual kind. Thus we find music included in the *materia medica non scripta* of the ancients. Orpheus, we are asked to believe, could draw all animate and even inanimate creation after him by the melodies obtainable from his lute; and the belief in the power of music to soothe the savage breast is an exceedingly antiquated creed. King Saul, for instance, in one of his illnesses had this remedy prescribed for him, and the youthful David was the dispenser.

Whilst it is impossible to say by whom the earliest knowledge of vegetable drugs was obtained, there is no doubt that the alchemists obtained the first acquaintance with the metals. The belief of the alchemists in the magical power of chemistry can to a great extent be condoned when we consider that certain, to them marvellous, effects were produced by chemical action. When such inexplicable, and consequently apparently magical, effects were produced, it was fair to assume that by investigation they could produce some still more wonderful results. Thus the "well of the philosophers," or nitro-hydrochloric acid, dissolved all the metals, and they considered that in it lurked some great hidden power. Gold was the most durable of the metals, and they considered that by its proper introduction into the human frame man would partake at least something of the nature of gold in withstanding the havoc of time. Alchemists merely partook of the general superstition of the age, for to the ancients thunder was the voice of Jove speaking in anger, and the lightning his thunderbolts; earthquakes were the fury of Neptune; and storms were produced at the caprice of Æolus. The great pursuit of the alchemists was, as everyone knows, the philosopher's stone, which was not only to have transmuted all the baser metals into gold, but also "through the permission of the Omnipotent, the greatest disease was to be cured, and sorrow, distress, evil, and every hurtful thing evaded; by help of which we were to pass from darkness to light, from a desert and wilderness to a habitation and home, and from straitness and necessities to a large and ample estate." The prolonging of life was a great feature of this mystic compound. One Arterphius is recorded to have lived to the age of 1,025 years by means of it. This latter report proves conclusively that the alchemists beat modern liars, if they did not eclipse modern chemists. Raymond Lully is said by Bergman to

have transmuted iron into gold in the presence of Edward I. in London (fourteenth century). Another case of actual transmutation which at one time had many believers was that of Elias the artist, who was said to have converted by means of a piece of the stone less than the size of a pin's head half-an-ounce of lead into the finest gold. Many authors detail the processes followed in the attempts to manufacture this wonderful stone or metal, but it is not necessary for me to select a quotation.

In looking at the history of early pharmacy throughout the world, we find Great Britain suffers seriously by comparison. In Arabia pharmacy was a distinct profession in the twelfth century. In the thirteenth century apothecaries' shops were to be found in France and Germany, having gardens attached in which the proprietors cultivated the indigenous plants. And while in the sixteenth century various laws were passed in France for the regulation of pharmacy, it was not until three centuries later that pharmacy received any legislation in England.

But although pharmacy in England as a distinct profession had no political existence until about four decades ago, the powers that were in the sixteenth century commenced to recognize the unfortunate state of the healing art which prevailed. In 1511 the first Act of Parliament relating to the profession of medicine was passed. It was entitled "An Act for the appointing of Physicians and Surgeons." This Act recognised that hitherto the "science and cunning of physic and surgery" had been exercised by ignorant persons who used sorcery and witchcraft and very noxious drugs, "to the grievous hurt, damage, and destruction of many of the king's liege people," but it did not effect much exorcism of that sorcery and witchcraft. Even the physicians and surgeons who qualified under the Act—who at that time also practised pharmacy, the grocers supplying the crude drugs—partook of the rampant superstition and used it largely in their practice. The faith of the patient was still worked upon, beneficially sometimes, prejudicially much more frequently. Cures by faith date from a very early period of the world's history; deaths from the same cause boast an equal antiquity. Sorcery and witchcraft died hard; there are even some symptoms of life in them at the present time.

It was not until the seventeenth century that the clouds began to roll away from the scientific sky. In that century chemistry first began to assume the dignity of a science, and pharmacy commenced to evolve itself out of chaos. Although in Germany a pharmacopœia was published in 1538, the first London pharmacopœia did not see the light until 1618, by which event Londoners proved themselves twenty-one years in advance of their Parisian *confrères*. Poly-pharmacy was a great feature of all the early pharmacopœias; one preparation alone, the mithridate, so called after Mithridates, who lived 135-63 B.C., and of whose original preparation it was a modification, containing seventy-two ingredients. Some compounds contained even more, and the chemistry was such that if they had an Umney, a Martindale, or a Symes in those days, fearful would have been their criticisms. But bearing in mind a recent issue of the British Pharmacopœia, I think it would be misleading to judge the pharmaceutical enlightenment of a particular epoch by its pharmacopœia.

Among the things used as medicaments in the first pharmacopœias were, so Culpeper translates: the fat, grease, or suet of a duck, goose, eel, bone, heron, thymallos (if you know where to get it), dog, capon, beaver, wild cat, stork, hedgehog, hen, man, lyon, hare, kite, jack, wolf, mouse of the mountains (if you can catch them), &c. Also were inserted "the excrement of a goose, of a stag, of a goat, of pigeons, of a stone horse, of swallows, of men, of women, of mice, of peacocks," &c. Culpeper remarks, parenthetically, that the college should have included the rennet of an ass to make medicine for their addle brains. Culpeper, however, was not the only man who has deplored a fault in others which he himself possessed. Dispensing according to the pharmacopœia must have been not always the most enviable of occupations in those days, and the neat and dapper chemist's assistant of to-day may grow philosophical when he thinks so.

In 1617 the apothecaries, who had hitherto been incorporated with the grocers, obtained a charter, and the Society of Apothecaries then formed soon became a prosperous and wealthy concern. The apothecary, whom our greatest English

\* From a paper read by Mr. W. G. Blackham before the Chemists' Assistants' Association.



poet describes in anything but flattering language, practised medicine as well as pharmacy, and the prices then obtainable are sufficient to make us think with a sigh of the "good old times." For example, a draught was 4s. 6d. or 2s. 6d., a blister 5s., a bolus 2s. 6d., and so on. It was not unfrequently the case that as much as 2l. or 3l. was charged for a supply of physic for one day's consumption, the profit being about 19s. in the pound. Each dose was then of more value than our bottle of to-day containing eight or sixteen doses.

It is impossible to say exactly when the title of "Chemist and Druggist" was first used, but it was probably about the middle of the seventeenth century. The first chemists, who derived their title from the alchemists, chiefly prepared those chemicals which Basil Valentine, Paracelsus, Van Helmont, and Glauber had laboured to introduce into the practice of medicine; but subsequent chemists extended the sphere of their operations, and it does not appear to have been very long before the "upstart chemist" began to evince that ardour for monopoly for which he has since been noted. The chemist and druggist, having entered successfully the commercial realms of the apothecary, also invaded his professional domains, as well as those of the physician and surgeon, and attempted the marvellous in the alleviation, or aggravation, of human suffering.

The pharmacies of the early chemists contained incongruous suggestions of the material and ethereal; there were the consulting room, in which prescribing and minor surgical operations took place; the laboratory, with its furnaces, alembics, retorts, receivers, stills, and numerous complex vessels, which had been inherited from the alchemists; and the shop, or pharmacy proper, which, while it did not present that regular and goodly array of shop-rounds bedecked with gold and red and black to which we are now accustomed, was perhaps more awe-inspiring with its astronomical devices, drugs *in statu natura* and in various processes of manufacture, and "skins of ill-shaped fishes" in bold relief, with

A beggarly account of empty boxes,  
Green earthen pots, bladders, and masty seeds,  
Remnants of packthread and old cakes of roses.

But just as at first conflicts took place between the physicians and surgeons, and at a later period between the physicians and surgeons and the apothecaries, so the apothecaries proceeded to wage war on the chemists and druggists. The apothecaries, who themselves had so largely practised adulteration that laws had to be passed for the searching of their shops and the examination of their drugs, first began to impugn the purity of the drugs sold by the druggists, but failed in almost every case to substantiate their charges. "Suspicion haunts the guilty soul," and the apothecary, who had almost brought the sophistication of drugs to a fine art, could not believe in the honesty of the chemists. Although the apothecaries distinguished themselves in this particular class of malefaction, yet we cannot accord to them the high honour of being the first to introduce adulteration, as it was an ancient institution even in the days of the Plinys.

Notwithstanding these attacks, the rising class of pharmacists continued to gain public and professional confidence, and by exhibiting a rapidly increasing superiority in the knowledge of drugs and their preparations gave "the lie direct" to their calumniators. One of the last dying efforts of those enemies of the chemist culminated in the formation of "The General Pharmaceutical Association of Great Britain." This association, which collapsed ignominiously after a shady existence of a few months, was to have exterminated the new class of dispensers of medicines, but had the unlooked-for effect of consolidating them as a body, and in 1802 the two opposing hosts coalesced in the face of a danger promising rinjury to both. This danger was the Medicine Act of that year, which the coalition managed to emasculate.

The first half of the present century is a time for ever memorable in the history of chemistry and pharmacy, gigantic strides having been made in both sciences. The discoveries of Priestley and Lavoisier at the end of last century opened great fields for succeeding chemical explorers. Hand in hand with the advancement of chemistry marched the sister science pharmacy. The pharmacist then acquired the reputation which he holds at the present day, as that of a man engaged in a mystic calling partaking both of the nature of a profession and a trade, and yet being neither.

## MATCHES.\*

THE first friction matches of which we have any account were termed "sulphur matches" and "Prometheans." Their value as instantaneous lights was due to the circumstance that a mixture of chlorate of potash and sugar at once delagrates if touched by sulphuric acid, owing to the liberation of oxygen and chlorine. There were two kinds: one in which a splint of deal was tipped with sulphur, and again by sugar and chlorate of potash. When a light was required, this was dipped into a bottle containing sulphuric acid. Rapid combustion ignited the sulphur, and this by anything but rapid combustion finally ignited the wood. By the time you had a light you were half suffocated.

But the first real friction matches were brought to light in 1827, by one Walker, a chemist and druggist and herbalist in Stockton-on-Tees. He had very thin slips of wood, about 2½ inches long, which he covered thinly with sulphur to one-third of their length, and then over this sulphur he painted a mixture of chlorate of potash, gum, and sulphide of antimony. These were put up in boxes of 50 and sold for 2s. 6d. On the outside of the box was glued a slip of glass-paper to produce the friction necessary for lighting them. I give this man Walker the preference of having first introduced a portable friction match, because I have every reason to suppose he was really first in the field.

My holiday last year was spent in climbing most of the Cumberland peaks. One evening, after a good day's work, I sauntered out of the Queen's Hotel in Keswick and went into a little museum they have in the town, and there amongst other things I saw a box of this Walker's matches. The museum ticket named it "Specimen of the First Box of Friction-Matches sold in England in March, 1827." It was a hinged box, and inside was an ancient handbill setting forth the wonderful merits of a sauce, one or two elixirs, and some wonderful julep. The handbill was dated from Stockton, March, 1827.

The reason why I mention this is because it is generally cited, I think, that the inventor of friction matches was a Sir William Congreve, a distinguished artillery officer, whose matches appeared only in 1832, and were identical with Walker's, except that you had to draw the matches between a piece of sand-paper to light them, hardly as elegant therefore as Walker's, you see. These last matches went by the name of "Congreve's," and it was a fluke if you got one out of ten to light, I believe, as it required very sharp friction to ignite them.

It was in this year that phosphorus matches appeared simultaneously in several countries. In England, Walker, of Stockton, was the first to make them. Possibly piqued at the imitation of his first friction matches by Congreve, whom he saw making a lot of money out of them, he set his wits to work, the outcome of which was the first phosphorus match in this country—at least Professor Faraday names him as being the first person in the world to bring phosphorus into use in making matches.

Walker's phosphorus matches were, however, intolerably bad; they were dangerously inflammable, and horribly poisonous to the makers. The lower jaw-bones of these were principally affected; they gradually rotted away until the mouth became a perfect open sepulchre, for there was nothing to close its orifice, and then the poor wretches quickly died of consumption. These matches were made simply by tipping splints of wood with a greasy paste of chlorate of potash and phosphorus. But in 1845 Schrötter, of Vienna, made the discovery that, by heating ordinary poisonous waxy phosphorus in vacuo, he obtained the now well-known brick-red non-poisonous phosphorus, known as amorphous phosphorus. This was tried by Schrötter in the manufacture of matches, and though he was successful in experiment, his enterprise failed financially, for the papers had been so full of accounts of the frightful disease produced from yellow phosphorus, that the public would have nothing to do with matches made from it. Consequently we find that about this time several modifications of the use of yellow phosphorus were introduced, one being what is known as the "Luminous Bottle." This was a bottle in

\* From a paper on "The Light of Other Times," by Mr. W. Baxter, junr., pharmaceutical chemist. Read before the Chemists' Assistants' Association.



which phosphorus had been melted and run thinly all over the inside surface of the same. This was then tightly stoppered. When a light was required, one of the old sulphur matches was put into the bottle and gently rubbed against its side; it was then brought out into the air and slightly rubbed against some felt or other material which ignited the sulphur, and subsequently the splint of wood; but this invention was not portable, and therefore was short-lived. There followed other devices more successful, some of which are still sold, I believe, in some places abroad. Among these were matches tipped in chlorate of potash, oxide of lead and phosphorus, sulphur matches tipped in oxide of lead and chlorate of potash, splints tipped with oxide of lead, nitrate of potash, and phosphorus (the silent matches so dear to the burglar), and sulphur matches tipped with oxide of lead and sulphide of antimony. Another modification was obtained by the sudden compression of air in a confined space containing some very combustible material. For this purpose, the beautiful experiment with Mollet's pump, or the ordinary fire-syringe, was employed. It consists of a small metal or glass cylinder in which a closely-fitting solid piston works. Heat is developed on rapidly forcing down the piston in the cylinder, and if a small bit of amadou be fixed to the piston and the action then performed, the tinder will be ignited sufficiently to inflame a sulphur match, and if a pellet of cotton wool saturated with ether be substituted for the tinder, a bright flash of light will be seen if the cylinder is of glass. I had given to me a short time ago by an old friend, aged 83, a stick which possessed a peculiar arrangement at the top; this I afterwards found to be merely an elegant adaptation of the principle of the fire-syringe. The old gentleman who gave it me said it was given as a present to him when a young man, which would be about 70 years ago, and, curiously enough, I came across an old chemical catalogue of experiments, and chemicals wherewith to perform them, by one Aecum, where such a toy was advertised at prices from one-half to 2 guineas each. The catalogue bore the date of 1817, and I have no doubt that my friend had his given to him as being one of the "newest things out" then.

Owing to the phosphorus scare, England, Germany, Sweden, and Denmark had prohibited the manufacture of matches from yellow phosphorus, and consequently the attention of experimenters was directed to the modification which Schrötter had announced. Schrötter continued to experiment, and Messrs. Dixon & Co., of Manchester, exhibited at the 1851 Exhibition their patent matches, the ignition mixture of which contained Schrötter's patent phosphorus, as it was then called. But even this second attempt of Schrötter's was not well received, showing that the phosphorus scare was not obliterated from the public mind. People bought them from the exhibition as curiosities, but they never became generally used, and eventually disappeared from the market. In 1852, however, Mr. Allbright, of Birmingham, took out a patent for a process by which amorphous phosphorus could be prepared on a large scale. In 1854 appeared in London for the first time Allbright's patent safety matches, but there is reason to believe that the idea was not his own, for they had been produced undoubtedly in Sweden in 1853 by Lundström, of Jonköping. In 1855 three continental firms made them, and exhibited them in the Paris Exhibition of that year. One of these exhibitors had a splint tipped at each end, and when wanted for use it was broken in the middle, and the two ends were rubbed together. These matches were called "Androgynes."

The chemistry of the modern safety matches is interesting. If we try to light them by drawing the club end of a match over any ordinary rough surface we find this attempt to ignite it useless; at last we happen to draw it over the rough reddish-brown paper on the side of the box, and it instantly lights. This is due to the fact that the tipping mixture on the match is composed in the main of chlorate of potash, 6 parts; sulphide of antimony, 2 parts; with glue, 1 part, as a binding material. But a mixture of chlorate of potash and sulphide of antimony in the proportions named would, if subjected to such friction as we put it to, detonate with tolerable violence, but their power of chemically acting on one another is here suspended by the presence of the glue; but when rubbed against the paper on the box we have presented to the chlorate of potash a body extremely prone to oxidation, and therefore very easy indeed of combustion, hence we obtain our light. The composition on the box is

amorphous phosphorus, 10 parts; sulphide of antimony, or oxide of manganese, 8 parts; glue, 1 part. These matches are now practically in the hands of the well-known firm with whose name they are so familiarly associated. I refer, of course, to Messrs. Bryant and May's, who purchased the process from Lundström, the Swede. In Sweden and Denmark the use of the ordinary matches is prohibited by law, and only "Swedish safety matches" allowed.

In 1861 a great improvement was made in lucifer matches as regards the preparation of the splint. Up to then the splint had always been tipped with sulphur before being covered with its ignition mixture; but the new idea did away with the objectionable smell of sulphur dioxide. The improvement was due to Mr. R. M. Letehford, a well-known London maker of lucifer matches; he had all the splints dipped into melted paraffin, which, up to that time, had been at a high price, and even then was not so cheap as it is now.

The manufacture of matches as now carried on is briefly as follows:—Woollen splints are cut by fine steam-saws from the very best quality of pine planks, perfectly dried at 400° Fahr. English splints are of two lengths, called large (2½ in. long) and minimkins (1¾ in. long). In England the splints are cut square, as a rule, and in Germany cylindrical. Double lengths are used. The ends of the double splints are first slightly charred; then the splints are dipped in sulphur or paraffin; then arranged on a dipping-frame, the ends projecting; and then dipped into the phosphorus composition, which is spread on a thin slab of stone to ¼ in. in depth, and kept warm by steam underneath. When dry, they are cut in two and packed in bundles of 100 ready for boxing.

The "tipping" composition differs in different districts and countries, but essentially consists of an emulsion of phosphorus in a solution of glue or gum with chlorate of potash, and with or without other matters for colouring, &c. In England the composition contains a considerable quantity of chlorate of potash, which imparts a snapping and flaring quality to the matches dipped in it, and but little phosphorus on account of the moisture of the climate. In Germany the proportion of phosphorus is larger, and generally some metallic oxide replaces the chlorate. Thus they light quicker with a lambent flame, but they are quickly spoilt if kept in a damp atmosphere.

The phosphorus emulsion is made by soaking 2 parts of glue in water until soft, adding water to 4 parts, and melting the glue in it by the aid of a water bath at 200° Fahr. Remove from the fire, and add gradually 1½ to 2 parts of phosphorus, agitating briskly all the time to form an emulsion. Add 4 to 5 parts of chlorate of potash, 3 to 4 parts of powdered glass and colouring agent, all in very fine powder. Stir until the whole is completely cold.

The annual production of amorphous phosphorus is 1,200 tons, of which over 90 per cent. is used in the match-trade, the total supply being furnished only by two firms, viz., Messrs. Allbright & Wilson, of Oldbury, in Birmingham, and Messrs. Coignet & Son, of Lyons, in France.

Wax vestas, which are now sold at the extraordinary price of 1/4 for 250 about the streets, have a tip composition of the following:—

P.	-	12 parts	In these the splint of wood is replaced by a number of cotton wicks, as many as two hundred sometimes occurring in a single match; these are closely platted together, and the whole impregnated with wax. The reason of their being so cheap now seems to be that a German named Letzer has only some two years ago patented a machine which begins and finishes the match in one consecutive operation.
Sb <sub>2</sub> S <sub>3</sub>	-	3 "	
PbO <sub>2</sub>	-	40 "	
HySO <sub>4</sub> einnabar	1	"	
Glue	-	14 "	

Inventive genius has been exercised in designing machinery for making the splints. In the 1851 Exhibition one of the most approved machines was capable of cutting 1,000,000 splints in four hours. About the same time there was a machine in Saxony by which 3,000 splints were made per minute. Then a London firm patented a machine for cutting 2,500,000 per diem, and Messrs. Dixon & Co., of Manchester, patented in about 1853 a machine for producing 9,000,000 per diem. Now the best machines turn out from ten millions to sixteen millions per diem, a number which, if put end to end, would reach 600 miles. This machine is in use at the Greenvale Chemical Works, Glasgow, and was invented by a Mr. John Lex Long.

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## SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.

SEE ADVERTISEMENT, PAGE 22.

## EDITORIAL NOTES.

### THE POISONS SCHEDULE.

No English Parliament that may be elected in the time of anyone now living is at all likely to sanction any such protection of pharmacists as is granted by the legislatures of continental nations. The principle approved of by the Pharmacy Act of 1868, and which justified that Act in a community which encourages in all branches of trade the freest competition, was that, to ensure as far as possible the safety of the public and for police purposes, a body of traders should be defined to whom should be intrusted the exclusive sale of substances, also rigorously defined, which should be regarded as poisons.

So far, it cannot be said that the Act has worked in all respects successfully. The statistics we have lately compiled from the Registrar General's returns seem to show that scheduling poisons has to a certain extent reduced accidents, but this point we treat separately. For the present we remark that the limitation of the sale of poisons to qualified persons has not, so far, been accomplished. The proportion of prosecutions to illegitimate transactions has been infinitesimal; the biggest prosecution undertaken proved the Act to be defective, and the result of seventeen years' experience of the law is that some offenders defy the Act, and thousands ignore it with impunity. Coroners, magistrates, and the public generally have but a nodding acquaintance with the Act, and even those most concerned in carrying out its provisions take but little interest in it.

It is greatly to be regretted that this should be the case. From a public point of view, as well as from a trade point of view, the Act was one of much promise, and we wish to show that pharmacists would best serve their own class, and might benefit the public materially, if they would recognise more freely the importance of the monopoly in poisons with which the legislature was anxious to intrust them.

There cannot be a doubt that in 1868 the medical department of the Privy Council, which really means the Government in such matters, desired to adopt chemists and druggists as the sole vendors of poisons to the public. Provision was made in the Pharmacy Act for a gradual extension of the poisons schedule, and it was heartily hoped that the trade in poisons could have been made a close one. There was not much direct profit to be got out of it, but there was a very considerable indirect advantage in making it known that chemists and druggists were the only persons recognised by law as competent to deal in poisons. This is nominally the case now; but there is not much substantiality about the theory, and the Privy Council authorities had evidently last year lost all interest in maintaining even the legal fiction.

There is no mystery about this result. Chemists definitely chose it for themselves, when some seventeen years ago they fiercely refused to come to terms with the Privy Council in regard to the storage of poisons. Mr. Carteighe stated this at the annual meeting of the Pharmaceutical Society last month, and his assertion was undoubtedly strictly correct. The medical department of the Privy Council lost their interest in chemists as poison vendors in consequence of the



refusal of the latter to submit to regulations. This was not the sole reason why the Pharmaceutical Council lost influence at Whitehall, but it certainly is a standing record there against the trade. The Privy Council claim that when the Act was passed there was an honourable understanding that some storage regulations should be agreed upon, and they say that, having got the Act, the trade turned round and refused to fulfil their part of the implied contract. Supposing that to be the case, is there a place left for repentance, and are pharmacists disposed to repent if they can find such a place?

To the first question we answer definitely, Yes. The poisons question is always being brought before the Privy Council in one form or other, and the medical advisers of that body would no doubt feel that their troublesome problem was half solved if chemists would work in harmony with their views. What are the reasons against their doing so?

The reasons most prominently urged have always been the following:—First, that the majority of chemists adopt such regulations as are necessary already. If so, it is obvious that the majority would not be inconvenienced, and it only remains to consider whether it is justifiable to coerce the infinitesimal minority who neglect such precautions as the majority, judging by their action, evidently think necessary. Then it has been contended that it was an indignity to apply regulations to chemists and not to enforce them upon doctors, dispensaries, and hospitals also. Why such regulations should not be applied to all who keep and dispense poisons we do not understand; but assuredly, in the interest of the trade, nothing better could be announced than that the only safe places to get medicines dispensed are chemists' shops. But the argument which always brought down the house in any meeting of chemists was that to carry out any storage regulations a system of inspection would be necessary, and chemists, who were Britons as well as shop-keepers, would never submit to that. Never, never.

But surely that ogre was greatly magnified. A great many classes of traders are subject to inspection, and they do not find it very irksome. Indeed, the trouble seems to be to prevent the inspectees from getting on too smoothly with their inspectors. In the case of chemists the only conceivable result would be that once or twice in a lifetime a pleasant gentleman would call in, ask to see the poison cupboard, pay a few compliments, sign a certificate perhaps, and pass on. And the chemist would be a very dull man indeed if he did not see his way to make bold advertisement of that Government certificate for the enlightenment of his neighbours.

Surely, then, there are many reasons why pharmacists should try to recover their lost position with the Privy Council, and study to win the confidence of all such officials as medical authorities, coroners, analysts, and others. A legally authorised system of poisons-storage would be the high road towards a new Government Pharmacy Act, more official recognition, a higher degree of public confidence, and the more general adoption of the plan of leaving dispensing to chemists. Moreover, it might save a few lives every year.

### CHEMISTS' PRESCRIBING VERSUS DOCTORS' DISPENSING.

A FORTNIGHT ago we reported at length an inquest held at Manchester, in which a notorious prescribing chemist again figured prominently. Mr. George Jackson, who describes himself as "medical and dispensing chemist," and who "got his qualification by practising before the Act was passed," was attending a somewhat complicated case, and, his patient not getting better, he called in a qualified medical man, and

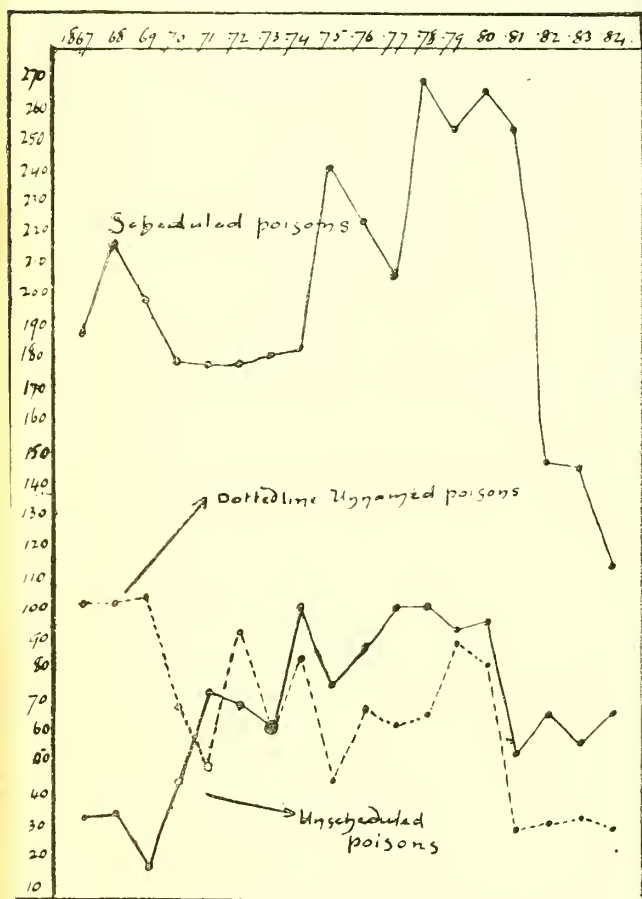
seems to have had a sort of "consultation" with him. This medical man, he said in his evidence, had only recently come to Manchester; but he admitted that he had found some difficulty in getting doctors to consult with him in consequence of a past "unpleasantness." After some catechising from the coroner, Mr. Jackson admitted that he had been "cautioned" by at least three coroners, but he had not been "censured" by any of them, though some ignorant reporters seem to have mixed up the two ideas. On this occasion the jury's censure was unmistakable, and the wonder is that Mr. Jackson has so frequently escaped a somewhat more tangible indication of a jury's disapproval. In last Saturday's *Manchester Guardian* there appears a letter from Mr. Jackson placing the case "before readers in its true light." The audacity of the letter is astonishing. The writer describes the "case" in the most approved medical style, narrates his own treatment and criticises that of the medical men in a kind but candid manner. That he has been unjustly persecuted and persecuted for acting "professionally" he is evidently as convinced as he is that his method of treating the patient was superior to that adopted by the doctor under whose treatment the death occurred; and he adds, "I may state, in conclusion, that I was present at the funeral of the deceased, and have since prescribed for the family, so you will have seen that there was no dissatisfaction on their part, but exactly reverse."

Now, just for the reason that we do not want to see a law directed against such conduct as that of Mr. Jackson, do we regret the occasional appearance of such practices. A law which gave to medical men a monopoly in the treatment of disease, even if at the same time it gave to chemists a monopoly in the preparation of medicine, would be a cause of perpetual irritation, inconvenience, and injury to all parties concerned—to the public most of all. Mr. Shepperson, who wrote to us a few weeks ago, urged a plebiscite of chemists on this subject, to be followed by negotiations with the Medical Council, with an Act of Parliament as the result. Now another correspondent is surprised that these suggestions have not been further discussed. We confess we are not surprised. There is no hope in them. It is nevertheless infinitely to be regretted that the superior skill in dispensing which the pharmacist usually possesses should be so largely left unused. There are hundreds of towns where the country surgeon is toiling away in his miserable dispensary after a weary day's round, or perchance his wife, or his groom, or sometimes his housemaid, is pitching drugs together with a happy disregard of incompatibilities, and not always a great anxiety as to effects. In those same towns there is, perhaps, generally a well trained pharmacist competent and eager to take all this work, and with all his skill rusting for want of exercise. Surely there must be many such cases where a little negotiation would bring about a smoother working of all that machinery. It is for the pharmacist to make the overtures, and whenever he decides to do so he will be wise to consider how little he can do the work for, rather than how much he can get out of it. If this course were more frequently followed, the dispensing would gradually pass into the hands of pharmacists, without the necessity of any tyrannical and unworkable Act of Parliament.

### ACCIDENTAL POISONING.

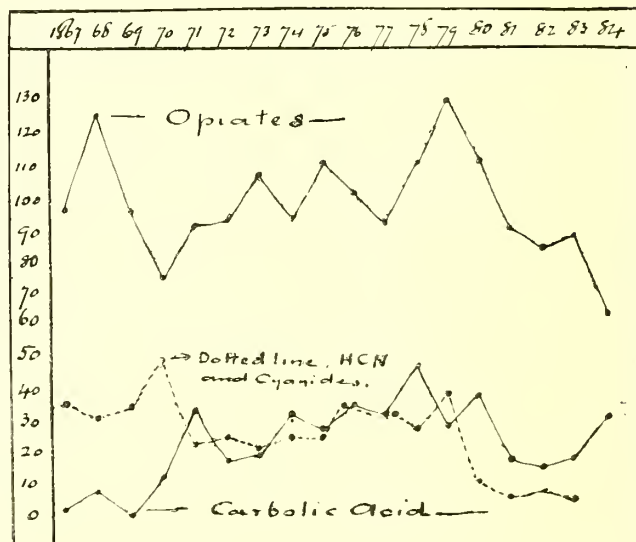
THE influence which the Pharmacy Act has had upon accidental poisoning is a subject which deserves very careful study. The statistics compiled by the Registrar General furnish the basis for such an inquiry as we have attempted, beginning with those for 1867. It is unprofitable to go back

further than that, because previous to 1869 an inordinate number of deaths from nameless poisonous substances occur in the returns, and these necessarily vitiate the totals and render them almost valueless for comparison. We may again point out what we stated a fortnight ago regarding the relation of the Registrar's returns to pharmacists and others who deal in poisons. We must eliminate from these returns all items which relate to such poisons and fatalities as have but a remote connection with pharmacy. In the former we have unwholesome foods and those poisonous fruits and roots which are eaten by children; and in the latter alcohol and lead poisonings, which between them are the cause of about 100 deaths annually. It is such cases as these that the Pharmacy Act does not touch, and they are, therefore, out of the count. The following charts are based upon the reduced scale. The side figures indicate the number of deaths, and the top rows the years.



It will be seen from the "scheduled" line that the immediate result of restrictions on the sale of poisons in this class was a gradual decrease for two years (1868-1870), and then a low level was maintained for five years; suddenly, in 1875, accidental poisoning went up to a point far above what it was in 1868, and in 1878 it reached the maximum of our record, from which point it may be said to have steadily decreased, until in 1884 a remarkably low figure was reached. The result is that in ten returns we have lower figures than in 1868, and in six years higher figures. The "unscheduled" line differs from this; on one occasion only—namely, in 1869, the critical year for poisons—the lowest level was reached,

but in all other years the records were higher than before the Pharmacy Act was enforced. We are not disposed to say that this increase is entirely due to greater use of non-scheduled poisons, for it would appear to be due in part to greater facilities for ascertaining the names of poisons which have caused death, a circumstance which applies almost in an equal degree to scheduled poisons. It will be seen from the dotted line that since 1869 the class of unnamed poisons has been perceptibly shrinking, and for the last four years has been remarkably small. But the true value of this chart will be better appreciated when compared with the following one, and when some other important factors are considered.



Here the upper line stands for opium, its preparations and alkaloids, preparations of poppies, soothing syrups, and the like, through which the largest number of deaths are caused. The other lines refer respectively to carbolic acid, and hydrocyanic acid and cyanides. The former happens to be the substance corresponding in the unscheduled list to opiates in the other; and the cyanides may reasonably be taken as an exceptional class of poisons, which are employed in arts generally by those who are well aware of their excessively dangerous nature, and who, on that account, divide responsibility with the sellers. It requires no argument to prove that the record condemns unscheduled poisons, for while those which are sold under restriction have in most years kept within the line, the former have steadily and with little fluctuation increased. Nor should it be forgotten that additions have been made to the scheduled list from time to time; for example, chloral hydrate was added in December, 1877, and during the four years immediately following 56 deaths from that poison were recorded. It will be observed that the records of these years are the highest, and chloral undoubtedly helped to bring up the totals. In the same years chlorodyne poisoning was also high, and in three of them the deaths from opiates, as will be seen from the chart, were considerably above the average. Were it possible to investigate the matter further, we believe that it would be found that insomnia is the main cause of excessive records. Whether insomnia exerts its fatal influences in cycles or not, is a question for medical men to settle. Pharmacists, as being the custodians of certain poisons, are more concerned to know how far their business habits are beneficial to the public, and it can without prejudice be said that the public has benefited by the provisions of the Pharmacy Act.



## METHYLATED SPIRITS AS A BEVERAGE.

APPROPOS of the case of drunkenness from the consumption of methylated spirit reported in our Edinburgh news last week, we have ascertained from direct inquiries that the use of this spirit as a beverage is of much more frequent occurrence in some of the principal Scotch cities than is generally supposed. We have obtained some curious evidence on this subject from gentlemen in the trade. One tells us that he recognised a bottle as having been brought three times in one day to be filled, but each time by a different person. On the third occasion the man was watched. He joined the two others who had previously been with the bottle; all three went into a stair, and each had a drink in turn. Another says he has suspicions of two or three persons who get methylated spirit. They always keep the bottle clean and invariably scrape off the label, while they do not appear to use the spirit for any trade purpose. A third says he knows several who drink it regularly. Since he found this out he keeps a bottle with some quassia chips in it. From this the spirit is supplied to "suspected persons," who, not liking this "blend," do not return. A fourth says his observation points to the conclusion that the demand for this "drink" by such persons has largely increased since the notorious methylated spirit case at Leith some time ago. It is jocularly known as "Leith Whisky."

The aggravated symptoms of alcoholism which have been recorded as produced by methylated spirit are due, we presume, to its alcoholic strength, not to any poisonous properties which it possesses beyond ordinary ethylic alcohol. It is nearly twice as strong as the best varieties of whisky. If those tipplers take it, as presumably they do, in the same quantities as whisky, the effects will be accordingly more pronounced. The surreptitious way in which they imbibe it will, moreover, probably lead to their taking it undiluted with water.

Dr. B. W. Richardson, in his Cantor Lectures on Alcohol, in 1875, recommended methyl alcohol in preference to ethyl alcohol for administration when alcohol of some sort was found necessary. He says, "the lighter the alcohol, *ceteris paribus*, the less injurious its action, and so we may put down methylic alcohol as the safest of the series of bodies to which it belongs." Have the lower orders been reading the Cantor Lectures?

## REGISTRATION OF LABELS AS TRADE-MARKS.

TRADE-MARK law was advanced a stage in the popular mind by a decision of Vice-Chancellor Bacon on Tuesday last. The British Tea Association have registered as a trade-mark a label on which they print a figure of a mandarin and the words "Imperial Mandarin Tea, imported from China." A firm at Portsmouth had sold tea in packets under the title of "Mandarin Tea," and the company prosecuted them for infringement of their trade-mark. It was proved that "Mandarin Tea" had been sold before the plaintiffs' mark had been registered, and it was also shown that the defendants' packets were totally unlike the plaintiffs' in style of putting up. The action was therefore dismissed with costs. The practice of registering labels as trade-marks is a very common one, and there seems to be an idea that this course protects the title. This is what it does not do. It protects the general label, but not any particular words on it. In the case before us the plaintiffs might as reasonably have claimed an exclusive right to the words "imported from China" as to

"Mandarin Tea" on the registration. The proper course to pursue when it is required to protect a fancy word or phrase is to register that only. Then, if the registration be valid, there can be no question as to what is protected.

## NOTE ON "VINUM IPECACUANILE."

MOST pharmacists will admit that the new process for the preparation of this wine is an improvement on that of the 1867 Pharmacopœia, but at the same time it will be granted that the alkaloids run a narrow risk of destruction by the heat necessary for the evaporation of the percolate to dryness. Few alkaloids are improved by long continued heating, and doubtless emetine is no exception to the rule. The Pharmacopœia orders the ipecac. to be macerated for twenty-four hours in the acetic acid (presumably to form an acetate of the alkaloid, which is a readily soluble salt), then percolated with water to one pint. But why percolate? If the combination of the emetine with the ipecacuanhic acid is broken up and acetate formed, surely the latter can be just as easily dissolved out of the root by the wine as it would be out of the dry extracts.

Slightly modify the official process, and we get the B.P. wine with the minimum of heat and labour. My *modus operandi* is to macerate the bruised ipecac. in the acetic acid for twenty-four hours, after which I place on a water-bath and evaporate till acetic vapour ceases to be given off. Then macerate the root in the pint of wine for seven days and filter.

The ipecac. is quite exhausted of its alkaloid, as is shown by Thresh's reagent giving only the merest trace of a precipitate with a second maceration of the residue. A sample of wine made by the above process three months ago has as yet shown no signs of a precipitate. W. I. T. D.

## NEW WATERPROOF MATERIAL.

MR. J. F. EBNER has patented the following composition:—112 parts glue; 56 parts resin; 10 parts boiled linseed oil, or other heavy oil; 35 parts water; indiarubber and colouring matter, in suitable proportion, as may be required. This "improved composition or adhesive anti-dry-rot waterproof material or compound," is to be used for securing parquet flooring to stone, concrete, wood, metal, &c.

## BROWNING GUN-BARRELS.

THE *Scientific American* gives the following formula:—Chloride of antimony mixed with a little olive oil. Add a few drops of nitric acid to sharpen its action, if required. Another: Sulphuric acid,  $\frac{1}{2}$  oz.; sweet spirits nitre,  $\frac{1}{2}$  oz.; blue vitriol, 2 oz.; alcohol, 1 oz.; tincture of the chloride of iron, 1 oz.; water, 40 oz.; add alcohol last.

A NEW CURE FOR COLD IN THE HEAD is published by H. de Launay in the *Gazette française de Médecine et de Pharmacie*. Neutral sulphate of atropine is recommended in doses of half a milligramme ( $\frac{1}{200}$ th grain) in a pill. It is stated that within ten or fifteen minutes from its administration its beneficial effects become apparent.

## THE NEW MEDICAL KNIGHTS.

THE Queen has recently conferred the honour of knighthood on several well-known members of the medical profession, and we have thought it would be of interest to give pencil sketches of the features of the gentlemen thus distinguished.

Sir Wm. White Cooper, who died a few days after being knighted, was surgeon-oculist in ordinary to Her Majesty.

He was an F.R.C.S., and occupied the position of consulting ophthalmic surgeon at St. Mary's, and consulting surgeon at the Western Ophthalmic Hospital. Mr. White's reputation



was exclusively due to his ophthalmic practice, and on the subject he had contributed numerous papers to the medical journals.

Sir Andrew Douglas MacLagan is well known to phar-



macists from his connection with the examinations of the Pharmaceutical Society in Edinburgh. Sir Douglas MacLagan is now in his 75th year, and is Professor of Medical Jurisprudence in the Edinburgh University, to which chair he was appointed in 1862. Previously he was an Extra-mural lecturer in *Materia Medica*. He has filled the presidential chairs of the Royal Colleges of Physicians and Surgeons, Edinburgh, has been a vice-president of the Royal Society of that city, and is a fellow of several learned societies, and an honorary member of the Pharmaceutical and other societies. Sir Douglas MacLagan is gifted with high scientific acumen, is a cultured scholar, has written largely on medical, chemical, and pharmacological subjects, and is the author of

"*Nugæ Canoræ Medicæ*: Lays by the Poet Laureate of the New Town Dispensary," in which there are some excellent after-dinner songs which are very popular amongst Edinburgh medical students. Sir Douglas in his younger days contributed several papers to the North British branch of the Pharmaceutical Society, in which he has all along taken a deep interest.

Sir Edward Henry Sieveking, M.D. (Edin.), owes his



eminence to some extent to his Danish origin, which secured for him the favour of the Princess of Wales, to whom he is physician in ordinary. He is also one of the Queen's physicians extraordinary, and holds appointments at St. Mary's and the Lock Hospitals, and at the Hospital for Paralysis and Epilepsy. Dr. Sieveking has written on nervous diseases, on epilepsy, and on numerous other subjects.

Sir Charles Sissmore Tomes is a surgeon who has devoted



himself to dental subjects, and has reached the top of his profession in that speciality. His manuals on "Dental Surgery" and "Dental Anatomy" are of established fame; his shorter papers and lectures on dental subjects are always regarded as authoritative.



## Foreign and Colonial.

THE nitro-glycerine works at Alduya, province of Valencia, Spain, have been destroyed by explosion. Thirteen persons were killed in the catastrophe.

THE new harbour and canal works at Hamburg are now approaching completion; the warehouses in course of erection are also nearly finished, and the preliminaries for incorporation of the city into the German Zollverein are about to commence.

THERE has been some talk of introducing the culture of indigo, of the East Indian variety, into Hungary, but competent authorities have declared the climate of the country unsuitable for that industry.

ODONTOLOGICAL institutes are to be added to all the Prussian university establishments. At present Berlin is the only one that has such an institute. The next to be arranged will be in Breslau.

GREAT excitement has been caused at Chemnitz in Saxony by wholesale poisoning of persons who partook of chopped meat, which proved to have been coloured by aniline dye. No less than 61 persons have been attacked, one case terminating fatally.

JAPANESE EXHIBITION.—It is stated that an exhibition of manufactured and raw products from the whole of Asia will be held at Tokio (Japan) in 1890. The Japanese Government have been engaged during the last two years in considering schemes for this exhibition.

By ministerial order a commission has been appointed in Italy to inquire into the question of the adulteration of olive oil by cotton-seed oil and the best means of its detection. The commission consists of four professors of chemistry and a member of Parliament.

THE capital of the Chemische Fabrik Buckau in Magdeburg will be increased from 2,100,000 to 3,000,000 marks in order to provide for the completion of two factories for working the ammonia-soda process. Caustic soda and soda crystals will be manufactured in these new works.

RUSSIA has not yet attained the acme of protection, as is sometimes supposed. The Government of the Czar have resolved to increase the customs duties on copper, zinc, and vitriol from 60 to 100; on soda and potashes from 15 and 30 to 40; and on alum from 25 to 30 copecks gold per pud. An export duty on phosphates has also been decided upon.

WEST AFRICAN CABLE.—The new cable ship *Britannia* left Greenwich a few days ago to lay the African direct cable. She will complete the shore ends at Bathurst, Accra, Lagos, Sierra Leone, Brass, and Bonny. The steamship *Seine* will follow shortly after with the second consignment of cable. Altogether 2,100 knots will be laid. It is expected that the opening of telegraphic communications will bring about a great development in the West African trade.

NEW FIRMS.—D. Bunge, Bremen, wholesale druggist. G. Fromm, Feuerbach, near Stuttgart, Germany, chemical manufacturer. Philipp Natge, Templehoff, near Berlin, perfumery. Peickert & Schmerse, Glatz, Germany, drugs, chemicals, and dyestuffs. Robert Spinnler, Glarus, Switzerland, chemical manufacturer. J. Striech, Wiener-Neustadt, Austria, soap and glycerine maker. Fritz Volz, Basle, Switzerland, wholesale druggist.

ACCIDENT AT ANILINE WORKS.—The substitution of hydrochloric for acetic acid in the manufacture of aniline has very nearly caused the death of five operatives in the works of Messrs. Durand & Huguenin, in Basle. It appears that this firm were in the habit of using in their works German hydrochloric acid, prepared with sulphuric acid from copper-pyrites, which always contain a large percentage of arsenic. During the process of aniline manufacture the arsenic chloride contained in the hydrochloric acid became transformed into arseniuretted hydrogen, which the operatives inhaled.

THE ozokerite mines at Byroslov in Galicia (the only ones of their kind) have been sold to a limited company, which will be chiefly worked by British capital under the style of the "Austrian Ozokerite Company (Limited)". The company was registered on May 28, with a capital of 800,000*l.*, divided

into 80,000 shares of 10*l.* each. A preliminary payment of one per cent. has been made to the present owners, and the remainder of the purchase-money is to be received by them within six months. The former proprietors were not able to work the mines to advantage owing to lack of capital, and it is thought that the new arrangements will be very advantageous to the paraffin and ceresin industry, which depends upon the production of ozokerite.

TRADE-MARKS IN AUSTRALIA.—*Invention* calls the attention of owners of trade-marks who are likely at any future time to do business in the Australian Colonies to a system of blackmailing which, it says, is rapidly assuming large proportions, and which is likely to interfere with their rights should they decide upon extending their operations. Certain persons in those colonies have recently made it a practice to register in Australia various trade-marks belonging to English firms, who, they thought, would eventually trade there, with a view to make these firms pay heavily. In this scheme they have succeeded in several instances. Firms likely to cultivate an Australian trade will do well, therefore, to at once register their trade-marks there, which can be done at a nominal cost.

THE AUSTRIAN TARIFF.—A bill for the revision of the Austro-Hungarian customs tariff has just been brought forward. The following are the duties proposed on some products affecting the drug and chemical trades. The figures printed in parentheses represent the duties at present enforced. All duties are per 100 kilos.:—Molasses for the manufacture of spirit, 6.0 florins (0.25); linseed, 0.50 *fl.* (free); rape and other oil-seeds, 0.50 *fl.* (1.0); bleached beeswax, 10.0 *fl.* (5.0); refined paraffin, 6.0 *fl.* (4.0); oleic acid, 2 *fl.* (1.50); table oils, 8.0 *fl.* (4.0); rape oil and linseed oil, 4.0 *fl.* (2.0); table vinegar in casks, 5.0 *fl.* (3.0); mineral oils, crude, of high specific gravity, 1.42 *fl.* (1.10); ditto, of low specific gravity, 2.10 *fl.* (2.0); lubricating oils, 5 *fl.* (1.90); sulphur free (1.10); sulphuric acid, 0.75 (0.50); glue, 6.0 *fl.* (1.50); dextrin, 3.0 *fl.* (1.50); concentrated ether and acetic acid, 24.0 *fl.* (10.0); oil varnishes, 5.0 *fl.* (3.0); perfumery, 75.0 *fl.* (50.0); wax candles, 25.0 *fl.* (10.0).

PHARMACY IN JAMAICA.—Our correspondent in Jamaica writes:—The drug trade shares largely in the all-round business depression. But for patent medicines and some domestic remedies which are in fair demand our drug-shops would be rightly termed groceries and variety shops. Counter-prescribing—once a paying auxiliary—is on the decline, owing to the Government offering greater facilities, freely distributed, for obtaining cheap and efficient medical aid. The Government dispensaries flourish fairly, and the ticket system for affording medical aid to poor persons not on the pauper roll is proving useful to the persons for whose benefit it was established. Considered in the interests of the country, the falling off in counter-prescribing is a boon; for in very many cases the peasantry—a bargain-hunting set—are imposed on by the ignorant prescribers, who educate them into the habit of temporising with their diseases, thereby neglecting early and proper medical attention, which is so important in the successful treatment of sickness. In conclusion, allow me to compliment you on the change in the issue of THE CHEMIST AND DRUGGIST. Your new venture is a great improvement, and enhances the reputation of the journal, as it enables matters of trade interest to be brought more promptly before your readers.

NEW SOUTH WALES has been furnished by nature with an excellent soil and a fine climate, capable of growing food for many millions. A considerable portion is covered with timber, chiefly of the eucalyptus order, and known as the gum-tree. There are twenty-seven varieties, most of which produce good timber for building purposes, and some, such as stringy bark, the red and blue gum, iron bark, and several others, are equal in quality to the oak and ash of England. There are over a hundred varieties of acacia, mostly known as wattle-trees by the colonists. The cedar-tree is becoming somewhat rare, as its home on the deep alluvial flats of the eastern rivers has been invaded by thousands of colonists. These flats were rapidly taken up for agricultural purposes, and the process of clearing, added to the great value of cedar timber, led to its wholesale destruction. Casuarina, banksias (honeysuckle), fig-trees, cabbage palms, with ferns in endless variety, make up the *ensemble* of an Australian forest.—*Journ. Soc. Arts.*

## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications relating to patents, designs, or trade-marks to be addressed to H. Reader Lack, Esq., Comptroller-General of Patents, Designs, and Trade-marks, Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "*Trade Marks Journal*," June 9, 1886.

"THE CHEE-TOR APERIENT WATER" and label, with landscape; for a mineral water. By Frederick Crossley (trading as the Chee-Tor Aperient Water Company), 5 Devonshire Colonnade, Buxton. 47,302.

Label, with a bell in centre; for Guinea Sauce or Relish. By Thomas C. Bell, 17 Claremont Road, Newcastle-on-Tyne. 49,938.

Circular label, with the words "TRADE MARK" and "TIEL, HOLLAND," with "V. & S." between; for glucose and caramel. By Verweig & Spoorenberg, Tiel, Holland. 50,259.

Label, for Mogul Chetna Sauce (50,319); "MOGUL," for foods (50,320); label, for the Emperor of Russia's Sauce (50,325); label, for Dr. Kitchener's Universal Sauce (50,326); "DR. KITCHENER'S UNIVERSAL SAUCE" (50,327); "KALAS GENESIS SAUCE" (50,329); "WOLSELEY SAUCE" (50,330); "NABOB," for foods (50,331); label, for French capers (50,332); "DR. KITCHENER'S SALAD CREAM" (50,333); a label, for the same (50,334); and "TIFFOO SAIB," for foods (50,335). By Batty & Co., Finsbury Pavement, London.

"ROUGE NE;" for plate powder, polishing paste, &c. By W. A. Carlyle, Constitution Hill, Birmingham. 51,344.

Design, made up of seven rings with the firm's initials and figures—1, 5, 6, 5, 8; for chemical substances used in medicine and pharmacy. By Rankin & Borland, Kilmarnock, Ayrshire. 51,533.

"THE 'ECLIPSE' BALL-STOPPERED BOTTLE" and monogram; for glass bottles. By Barnett & Foster, Niagara Works, 26 Eagle Wharf Road, London, N. 51,589.

"FAIRY;" for common and perfumed soap. By Morris & Jones, 21 Water Street, Liverpool. 51,630 and 51,631.

"QUEEN'S JUBILEE SOAP;" for common and perfumed soap. By Hodgson & Simpson, Calder Soap Works, Wakefield. 51,804 and 51,805.

Label; for Lily of the Valley bouquet. The title placed diagonally across the label, with sprig of the flowers in one corner and name of firm and other wording in the other. By Charles Parton (trading as Parton, Son & Co.), 138 Digbeth, Birmingham. 52,016.

"GINGER GIN," monogram and address; for an aerated non-alcoholic beverage. By R. White & Sons, Canard Street, Camberwell. 52,036.



## PARTNERSHIPS DISSOLVED.

GODFREY & COOKE, Conduit Street, Bond Street, and Wilton Crescent Mews, chemists.

KEMPSON & HOWELL, Pyc Bridge, Derbyshire, and Leicester, manufacturers of chemicals.

## RECEIVING ORDERS AND DATES OF PUBLIC EXAMINATION.

BLEWITT, BYRON, Leadenhall Street, London, and Adelaide Road, Hampstead, surgeon. July 21, 34 Lincoln's Inn Fields.

NELSON, JOSEPH JACOB, and JOHN NELSON (trading as J. Nelson & Sons), Blyth, Northumberland, chemists, grocers, and mineral water manufacturers. June 15, Newcastle-on-Tyne.

WILCOCKS, NATHANIEL GEORGE, Bath, sole water machinist and engineer. June 24, Bath.

## FIRST MEETING.

NELSON, JOSEPH JACOB, and JOHN NELSON (trading as J. Nelson & Sons), Blyth, Northumberland, chemists, grocers, and mineral water manufacturers, June 15, Official Receiver's Office, Newcastle-on-Tyne.

## ADJUDICATIONS.

BIRCH, WILLIAM FREDERICK, Birmingham (trading as the Odontobaph Company), registered dentist, manufacturer of perfumes, dental preparations, and dental appliances.

METCALF, THOMAS (trading as Thomas Metcalf & Co.), Miles Platting and Cheetham, Manchester, manufacturing chemist and drysalter.

STANLEY, JOHN ALBERT, Leamington, veterinary surgeon's assistant.

## NOTICES OF DIVIDENDS.

MANGLES, JOHN (trading as John Mangles & Co.), Didsbury and Manchester, drysalter—dividend of 2s. 10d. forthwith, Mr. J. Eckersley's, 64 Cross Street, Manchester.

TOBIAS, ALEXANDER JOHN, and HENRY ASHUR TOBIAS (trading as Tobias & Co.), Liverpool, chemical brokers—first and final dividend of 3s. 6d. on and after June 10, Mr. J. S. H. Banner's, 24 North John Street, Liverpool.

TYBURN, JAMES, Kingston-upon-Hull, doctor of medicine—dividend of 1s. 11d., June 9, 16 Parliament Street, Hull.

## BANKRUPTCY REPORTS.

EDWARD LAWRENCE CLEAVER, 41 Church Street, Richmond, Analyst.

On Monday the first meeting of creditors under this failure was held before Mr. Wreford, one of the Assistant Receivers. The receiving order was made on May 4, and the accounts filed show total liabilities 4,207l. 17s. 5d., of which 3,315l. 17s. 5d. was secured, against assets *nil*. There was no offer, and resolutions were passed for bankruptcy; Mr. Rawlings, accountant, 82 Queen Street, being appointed trustee, with a committee of inspection. The following is a list of creditors:—

Walker, H. H., Red Lion Square .. .. .	£1,000 0 0
Buckwell, T. D., St. James Street, Burgess Hill .. .. .	787 13 5
Blundstone, Regent's Park .. .. .	700 0 0
Blanche, T., King's Road, S.W. .. .. .	123 4 0
Alsop & Mann, Great Mariborough Street .. .. .	90 0 0
Stacy, Ruth, & Casle, Southampton Row .. .. .	40 0 0
Churchill & Co., Burlington Street .. .. .	15 0 0

## Fully Secured.

Consolidated Credit Co., Great Tower Street .. .. .	68 0 0
Cooke & Lemon, 9 Broad Street, E.C. .. .. .	212 0 0

## Partly Secured.

Wadley, Southampton Street, Holborn .. .. .	1,100 0 0
Cleaver, E., 39 Great Portland Street .. .. .	51 0 0

THOMAS ALFRED GLOYNE & JOSEPH EDWARD COCKER, trading as Gloyne & Cocker, Dewsbury, Oil Merchants.

THE statement of affairs in this matter is as follows:—  
Liabilities.—To unsecured creditors, 2,481l. 9s. 6d.; preferential creditors, 31l. 5s. 11d.; less payable in full, 29l. 9s. 11d.; difference to rank for dividend, 1l. 16s.; total, 2,483l. 5s. 6d. Assets.—By stock-in-trade, 101l. 6s. 8d.; book debts, good, 72l. 13s. 10d.; bad, 25l. 2s. 1d.; total, 97l. 15s. 11d., estimated to produce 75l. 17s. 6d. Other property estimated to produce 218l.; surplus from the separate estate of Thomas A. Gloyne, 363l. 3s. 1d.; total, 758l. 7s. 3d., less preferential creditors as per contra, 29l. 9s. 11d., leaving a net total of 728l. 17s. 4d., and showing a deficiency of 1,754l. 8s. 2d.

The following is a list of the principal unsecured creditors:

Brown, Arthur, & Co., 55 Bishopsgate Street Within, London .. .. .	£ 33 9 8
Bauer, Samuel, Fazakerley Street, Liverpool .. .. .	20 13 11
Brace, H. S., 203 High Street, Hull .. .. .	24 9 4
Barton, Richard, 18 Commercial Road, Hull .. .. .	108 5 4
Blakeley, F. H., Sanial, near Wakefield .. .. .	80 0 0
Cockcroft, Samuel, Allerton, near Bradford .. .. .	81 4 9
Donaldson & Co., Hawick, N.B. .. .. .	48 0 4
Exors. of Thos. Fletcher, Littleboro, near Manchester .. .. .	21 1 3
Eyler, Hugo, 38 Brook Street, Manchester .. .. .	48 5 2
Findlater & Co., 19 Waterlow Street, Glasgow .. .. .	82 0 0
Greenwood, William, Earlsheaton .. .. .	20 0 0
Huddersfield Banking Co. (Limited), Dewsbury .. .. .	553 0 0
Holt, Alfred, & Co., Fazakerley Street, Liverpool .. .. .	43 11 0
Joy, William, & Son, Sealecoates, Hull .. .. .	12 0 3



	£	s.	d.
Joy, Charles, Cumberland Street, Hull .. .. .	12	12	2
Jimenez & Lamothe, Malaga, Spain .. .. .	88	2	3
Marangolo, George Frederick, Messina, Sicily .. .. .	88	16	6
Oakbank Oil Co., 224 Ingram Street, Glasgow .. .. .	70	7	2
Pumpherson Oil Co., 115 St. Vincent Street, Glasgow .. .. .	93	14	4
Rawstorn, James, High Street, Hull .. .. .	281	3	5
River Head Oil Mills, Louth .. .. .	14	0	3
Stubley, James, Oil Merchants, Batley .. .. .	193	8	10
Turner, John, Sowerby Bridge .. .. .	80	1	3
Thompson, Bedford, & Co. (Limited), 18 Exchange Street, Manchester .. .. .	150	19	8
Vickers, B. R., & Sons, Oil Merchants, Leeds .. .. .	131	6	6
Wileock, John, & Sons, Oil Distillers, Mytholmroyd .. .. .	37	0	0
Young's Oil Co., 45 Dantzic Street, Manchester .. .. .	30	4	1
Sundry Creditors under Ten Pounds .. .. .	36	12	1
	2,481	19	6
Preferential Creditors .. .. .	31	5	11

The separate estate of Alfred Gloyne.—The statement of affairs in this matter discloses liabilities, 33*l.* 17*s.* 1*d.*; assets, 397*l.* 0*s.* 2*d.*, showing a surplus to the joint estate of 363*l.* 3*s.* 1*d.*

JOHN DRUMMOND, 6 George Yard, Fenchurch Street, and Southend, Drug Merchant.

UNDER this failure, particulars of which have already appeared in *THE CHEMIST AND DRUGGIST* from time to time, a new first meeting of creditors was held last Friday at the London Bankruptcy Court. The matter had already gone into bankruptcy, but now a composition of 5*s.* in the pound was offered. This, however, the Southend creditors rejected, and in the end Mr. Charles Denny was appointed trustee, and the disputes between the creditors will now probably be fought out between them.

#### THE FAILURE OF A KERSLEY MANUFACTURING CHEMIST.

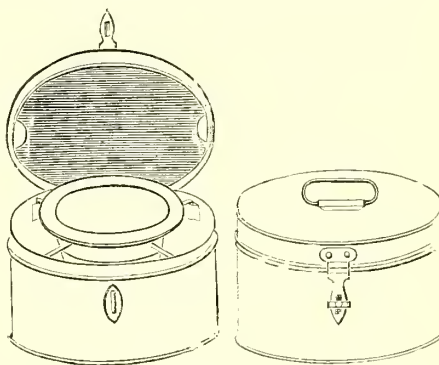
—The first meeting of the creditors of Timothy Morrow, manufacturing chemist, Lark Hill Chemical Works, Kersley, was held on June 4, at the offices of the Official Receiver in Bolton. The debtor has liabilities fixed at 597*l.* 15*s.* 5*d.*, and assets 176*l.* 10*s.* 9*d.*. He commenced business in the year 1854, with a capital of 1,000*l.*. He very soon began to feel the want of more capital, and had of late years been very much pressed for money. He attributed his failure to depreciation of plant, loss on steam-boiler, and expenses in excess of income. An order for summary administration having been made, and the debtor adjudicated a bankrupt, no resolution was passed.

FAILURE OF A MEDICAL MAN.—A meeting of the creditors of Arthur Legge Roe, Beechcliffe, near Newcastle-under-Lyme, physician and surgeon, was held on Tuesday, in the offices of the Official Receiver (Mr. T. Bullock), who presided. The statement of affairs showed gross liabilities to the amount of 1,955*l.* 14*s.* 8*d.*, these being composed of 1,938*l.* 6*s.* 8*d.* as representing unsecured creditors, and 17*l.* 8*s.* preferential creditors. Of this sum 1,943*l.* 13*s.* 4*d.* is expected to rank for dividend. The assets are: Stock-in-trade, 4*l.*; household furniture, 311*l.*; other property, 620*l.*; total, 935*l.*. Deducting the preferential claims, the deficiency is 1,020*l.* 14*s.* 8*d.*. The debtor entered into partnership with Dr. Hayes at Beech Cliffe in 1882. Prior to that time he had for some years been in the Royal Navy. There are 39 creditors, 18 being for amounts over 10*l.*. Of the total liabilities 1,085*l.* appears to be for money lent by the debtor's friends during the last four years. Mr. W. H. Dutton stated that he thought the estate would pay a composition of about 8*s.* in the pound after all costs were paid, and 10*s.* in the pound was guaranteed by Mr. Roe, sen. He also proposed that the creditors should take over the book debts, so that they might get the most out of them. The Official Receiver said this was a rather novel proposition, which he took to mean in effect that the estate would be vested in him, as a trustee, for him to wind up, Mr. Roe, sen., being responsible for what was required to make up the composition named. After some conversation it was agreed to entertain this scheme, it being understood that Mr. Roe would pay the necessary balance at the end of six months, and take over what was not realised of the estate.



#### TRAVELLING AND NURSERY CONVENIENCE.

MESSRS. J. ALLEN & SON, 21 and 23 Marylebone Lane, W., have introduced a travelling requisite which is calculated to be a very useful article on long journeys and in other unusual circumstances. The article consists of an imitation-oak metal box, exactly resembling the luggage-boxes which are now quite common.



From the illustration it will be seen that the earthenware pan is inserted in a projecting metal holder in such a way that it can readily be removed, and leaving a large air-space around it, thus providing for deodorants, &c. The lid is padded with waterproof material, so that when closed the box is practically air-tight, and, however knocked about leakage of the contents is impossible. The article is excellently designed in every respect.

#### RADLAUER'S PREPARATIONS.

THESE are very tastefully put-up articles, made by Herr Radlauer, of Posen, Germany, some of which are in common request, and others are worthy of being brought under the notice of physicians. The Feralbumin Chocolate is a palatable form for the administration of an active hæmatinic, and appears to be specially suitable for children. Each tablet contains  $7\frac{1}{2}$  grains of albuminated iron. Essence of Pines (Coniferen Geist) is an agreeable perfume, and, owing to its terebinthinate nature, is an active disinfectant for the sickroom. The Lanolin Soap made by Herr Radlauer is useful in cases of skin irritation, and is also proposed for washing the hair, to which it imparts a natural softness and gloss. Tamarind Confection, with or without pepsin, and the salicyl-vaseline preparations are also attractively put up. All these preparations retail at very moderate prices.

#### AGNIN.

THE prominence which has lately been given to pure wool-fat as an ointment base has brought from the United States a preparation which differs in some respects from the lanoline of Liebreich. We have ascertained that Agnin is free from water, and to this fact is due its brown colour, for when mixed with a fourth of its weight of water it changes to a lemon-yellow colour, and when more water is added a greyish hue is assumed. The change from brown to grey by admixture of water is phenomenal, and the readiness and extent to which water may be incorporated with the fat is no less so. We have readily incorporated two parts of

water with one of Agnine, and the mixture possessed the consistency and adhesiveness of the pure fat. Liebreich's tests show that the fat is free from foreign matter; it has a specific gravity of 0.916 at 50° C., and melts at 42° C. The fat is somewhat tough, but melts readily when applied to the skin. The unpleasing feature of Agnin is its odour: had it a little less of the sheep's wool about it, it would be more agreeable in use; but it should be observed that this odour changes perceptibly and is rendered more pleasant by mixing with water. It is possible that we may have to change our ideas regarding the absorptive properties of wool-fat; but even though that be so, the fact remains that wool-fat is destined to be of great use in therapeutics, owing to the readiness with which it mixes with water, and to its non-saponifiable nature. The makers of Agnin are Messrs. Theodore Metcalf & Co., Boston, Mass., U.S.A., and their agents in London are Messrs. Burroughs, Wellcome & Co.

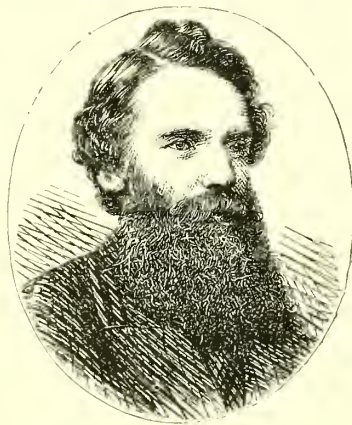
### Obituary.

DAVIES.—On May 23, Mr. Daniel Davies, chemist and druggist, Newcastle Emlyn. Aged 27.

FOX.—On April 28, Mr. William Albert Fox, chemist and druggist, Stratford, London. Aged 39.

WRIGHT.—On May 15, Mr. Bentley Warren Wright, chemist and druggist, Loughborough. Aged 32.

MR. WILLIAM SOUTHALL.—We have to record the death of this well-known and universally-respected pharmacist and botanist. Mr. Southall has been for many years in a very delicate state of health, and his life has been preserved so long only by the utmost care. He died on Wednesday of this week at his residence, Sir Harry's Road, Edgbaston, in his 61st year. A few months since, his withdrawal, on account of fail-



ing health, from active partnership in the business carried on under the style of Southall Brothers & Barclay was publicly announced, and in May, 1885, he resigned his position as a pharmaceutical examiner for the same reason. In 1880 Mr. Southall presided over the British Pharmaceutical Conference when the sessions were held at Swansea, and his address on that occasion is remembered for its scholarly tone and its delicate humour. Mr. Southall would have taken a much more prominent part both in the political and in the scientific affairs of pharmacy if his health had permitted; but in these, as well as in the service of his fellow-townsmen, in many pious directions, he did vastly more than many men who have not the excuse he might have pleaded for idleness. Assuredly he did what he could.

MR. GIOVANNI ARENA, of 82 Mark Lane, London, E.C., has been appointed agent and consignee for the sale of Domenico Battaglini's Palermo oil of lemon.

### Trade Report.

*It should always be remembered that prices quoted in this section are as nearly as can be ascertained the lowest that are actually paid for bulk quantities. Considerable allowances have to be added in many cases before ordinary prices can be ascertained, and for many drugs it must be recollected the range of quality is very wide.*

MINCING LANE, June 11.

TRADE has been very quiet throughout the week, and scarcely any attention was manifested in the drug-sales held on Thursday. The only incident worth noting in these auctions occurred when a parcel of cascarilla bark in Messrs. Lewis & Peat's sale was offered. Samples of this cascarilla had been placed on show as usual, and the sample bearing the number corresponding to one of the lots was stated to show a quality greatly superior to the others. When this lot was reached the head of one of the principal German export houses asked whether the selling broker guaranteed the lot offered to be equal to the sample shown. It was answered that the samples did not represent the quality of each lot, but should be taken together as an average sample of the whole parcel, as the brokers, in order to save expenses, had drawn samples of a few bales only and not of every package in the parcel. After some conversation it was agreed that the lots should be sold according to the sample bearing the corresponding number, and that the buyer would be at liberty to refuse acceptance of the goods if not equal to sample. The incident shows a desire on the part of importers and brokers to curtail the sale-expenses on goods offered in London, which are exceptionally heavy, and place our market at a great disadvantage as compared with some Continental ports. The heavy London charges hitherto prevailing have caused many exporters abroad to consign goods to Continental ports. We understand that energetic steps will shortly be taken to reduce the charges in several directions, amongst others by abolishing the allowances of tret, draft, and discount. If this be done exporters abroad will no doubt find it to their benefit to again consign all their goods to London, where other advantages are offered them which no Continental ports can hope to equal.

ALOE.—Of *Cape* a fair quantity, viz. 137 cases, were catalogued. The demand for this variety was limited, and only 46 cases were sold at about 1s. 6d. to 2s. lower rates, viz. 30s. to 32s. 6d. for good to very good hard bright, 20s. to 28s. for ordinary drossy to fair but soft, and 15s. down to 10s. for common to very low. Eleven boxes *Natal* were withdrawn. Of *Curaçao* only 25 boxes of so-called "Capey" character were sold at 52s. 6d. for the entire parcel. In *East India* variety very little was offered, but a parcel of fine palish genuine Zanzibar aloes (*Socotra*), packed in boxes, was quitted at 6l. 2s. 6d. This lot was much harder than the parcels which are generally offered in skins, and the lot was decidedly cheap at the price.

AMBERGRIS.—Nine tins were offered, a quantity larger than has been in sale for some time, but the quality left much to be desired. We understand that some fine amber will shortly be placed on the market.

ANNATTO, firmer. Of good bright *Pará* roll ten baskets were sold at 2s. per lb.; another lot was bought in at 2s. 2d. per lb. nominally. One barrel good bright *seed* from Madras realised 5½d. per lb., being an improvement; some West Indian is held at 6d. to 7d. per lb.

ARECA NUTS.—Thirty bags from Singapore not meeting with any offer were bought in at 12s. per cwt. nominally.

BAEL FRUIT.—Thirteen bags offered and sold at cheap rates, viz., 4d. for bold, partly dark and broken slices, 3d. for darkish fragments.

BALSAMS.—Of *Capivi* some 25 cases were shown, but buyers are unwilling to concede the prices asked, and the whole was bought in at prices ranging from 1s. 4d. to 1s. 7d.; for good, pale Maranham 1s. 5d. is asked. *Peru* without business at 5s. 6d. per lb. for good quality. Two tins scum



and sediment were knocked down at 3s. 9d. per lb. after fierce competition. *Tolu* neglected.

**BEANS.**—Three cases bold heavy *Ignatius* are held at 2s. per lb., 6d. being suggested by a would-be buyer. *Tonquin* without improvement; good Surinam held at 2s. per lb. Pará character at 1s. 6d. to 1s. 7d. per lb.

**BUCHU LEAVES.**—The quantity offered, although not very large, met with no interest. A lot of good green, sound leaves, partly first-class sea-damaged, was sold at 2d. per lb.; 8½d. was in vain solicited for sound, long leaves. The parcel of spurious buchu (*Empleurum serrulatum*) mentioned in our last issue was now actually offered for sale, but no one would bid for it.

**CAMPHOR** continues in a depressed condition. *Japanese* has been sold at 64s. per cwt. in moderate quantities. The Hiogo market at the beginning of May was suffering in consequence of heavy arrivals from the interior, but the closing tendency was firmer. During April 4,600 piculs charged hands there.

**CANELLA ALBA.**—Of this article, which is very scarce at present, 3 bales of good pale quill, partly broken, were offered and disposed of with good competition, at 39s. per cwt., rather cheap considering that a lot only slightly better fetched 42s. not long ago; and another lot much damaged sold at 35s. per cwt.

**CANNABIS INDICA** shows a weaker market. Good green, somewhat stalky and dusty, held at 4½d., a bid of 4d. being declined; for very stalky ditto, 3d. was solicited in vain. A lot of very ordinary dust and stalk, though offered without reserve, found no purchaser.

**CARDAMOMS.**—A total supply of 152 packages was catalogued, of which only 46 packages were disposed of, mostly at irregular prices; but in some instances values were well maintained. There was a marked absence of really fine fruit. *Mangalore* of the well-known C C over C mark, but not up to the standard, being rather yellow and undersized, realised 2s. 3d. to 2s. 9d. per lb.; other marks, medium to bold smooth, 2s. 7d. for plump, 2s. 6d. for long fruit, and small to medium 1s. 3d. to 1s. 6d. *Ceylon-Malabar* long, medium to bold, pale, slightly country damaged 2s. 1d.; pale-brown, clipped, plump 1s. 6d.; yellow, small, partly clipped 1s. 4d. to 1s. 5d.; ordinary part split husks and seed, mixed with clippings, 1s. 4d. to 1s. 5d. *Alleppey* fair, plump to long, 1s. 6d. to 1s. 4d., small 6d. to 8d. An offer of 2s. 2d. per lb. was now refused for a parcel of fair, brown, unclipped fruit. *Seeds* sold at 1s. 1d. to 1s. 6d. per lb. Some time was taken up to sell two pounds of empty husks at one penny per lb.

**CASCARILLA BARK.**—The sale of a parcel of 100 bales, freshly imported, gave rise to the alteration referred to above. The whole was disposed of at 25s. 6d. to 27s., except a lot of which the sample showed a quality decidedly superior to the remainder, viz., fairly entire quills, white outer and pinkish inner bark, and which realised 28s. per cwt. The price shows an improvement of about 1s. 6d. to 2s. 6d. per cwt.

**CASSIA LIGNEA.**—Lower rates, viz., 25s. per cwt., have again been accepted for this article. In public sale 500 boxes remained unsold.

**CHILLIES** about 4s. cheaper, holders pressing their supplies on the market. Dull and dark to good Zanzibar quoted at 28s. 6d. to 32s. per cwt.

**COCA LEAVES** are entirely neglected, and not one bale was sold, although 44 were shown. Owners continue to hold at previous values. Six cases genuine leaves, but quite broken and very badly damaged, offered without reserve, failed to meet with a bidder.

**COCCULUS INDICUS.**—Good *Cochin* held at 8s. 3d. per cwt., an offer of 8s. being refused.

**CINCHONA BARK.**—Little interest was evinced in the parcels offered in drug-sale this week, and which, as usual on this occasion, consisted mainly of South American bark. The only lots sold were 48 bales *Lima* in grey quill, partly mossed and rather broken, which realised 5½d. to 6d. per lb. Some red bark was bought in; a case of fairly good quality in small to bold flat pieces, showing a good deal of outer bark, at 5s., and some inferior bark, quill and flat mixed at 1s. 6d. per lb.

**CINNAMON.**—The supply at last week's auctions was large owing to the system of quarterly sales being again resorted to; a fair demand prevailed, and the quantity sold realised steady prices for the lower qualities, while fine descriptions showed in some instances a decline of 3d. to 4d. per lb. for old importations. Of 2,601 bales *Ceylon* offered, about 1,600 bales sold. *Fourths*, ordinary at 6d. to 6½d.; good at 7d. to 8½d., fine at 9d. *Thirds*, ordinary at 6½d. to 7d.; fair to good at 7½d. to 10d., fine 1s. *Seconds*, ordinary to fair at 7½d. to 8d.; good at 10½d. to 1s., fine at 1s. 3d. *Firsts*, ordinary at 8d.; fair at 8½d. to 9½d., good to fine at 1s. to 1s. 4d., superior at 1s. 6d. to 1s. 7d., very fine at 1s. 9d. 271 bales *Tellicherry* sold, ordinary broken at 3d. to 3½d., fair to good at 4d. to 5d. *Thirds* at 7d.; *Seconds* at 7½d. to 8d.; *Firsts* at 9d. to 9½d. per lb. *Chips* steady, 460 bags *Ceylon* sold, ordinary to good at 1½d. to 2d.; quillings, cuttings, &c., at 4d. to 6d. per lb.

**CUBES** nominally held at 17l. to 17l. 10s. per cwt. It is stated that the large arrivals mentioned in our report of May 29 belong to American firms, and only passed here in transit. In sale 38 bales of stalks bought in at 60s. per cwt. Nine bags from Penang were taken out, the prevailing opinion being that these berries were not genuine. They are very large and too fully developed, but they fully answer to the recognised tests for cubes.

**ERGOT OF RYE.**—Values are slightly lower; 1s. 2d. was offered for small *Spanish*, and 9½d. for good *Russian*.

**GALLS** liberally offering; 452 bags *Turkey* were catalogued, but only a small portion was sold, at about previous rates, viz., 57s. 6d. for good blue, 47s. for damaged blue, and 32s. to 37s. for very damaged blue and white mixed.

**GUINEA GRAINS.**—15s. 6d. paid for good bright; 7s. 6d. for an ordinary, dull lot.

**GUMS.**—Of *Ammoniacum* nothing was sold, and lower prices would have to be accepted to induce business. Good pale siftings and drop are held at 40s., palish ditto at 36s., mixed siftings and block, partly seedy, at 25s., dark ditto at 18s. per cwt. The market for *Arabic* shows little alteration, except for low E. I. qualities, which are neglected. Senegal quotations are unchanged; there is a little more inquiry, but no transactions worth noting are reported. A good assortment of gum was offered on Thursday, but the only parcels sold were 10 casks pale picked Aden at 100s. to 102s. 6d., and 3 cases coarse dark Bombay siftings at 8s. 6d. per cwt. *Asafoetida*, none offered. *Benjamin* sold fairly well at cheap rates. There was a fine assortment of Sumatra gum (seconds), which realised 10l. for very good bold almondy, slightly false packed at corners. 9l. to 8l. for good almondy with brown borders to ditto one-fourth false packed; 7l. 10s. to 6l. 10s. was paid for good to fair thirds, and 50s. to 35s. for very ordinary woody Palembang. *Dragonsblood* shows no change. 7l. 17s. 6d. was paid for a case of partly broken pipes in reed, good bright colour. Ten cases extremely ordinary *Elemi*, packed in reed and nearly black, sold at 5s. per cwt. "without reserve." Of *Gamboge* only 2 cases sold at lower rates, viz. 11l. 17s. 6d. for partly broken and blocked pipe of fair colour. *Guaiacum*.—½d. per lb. paid for good quality. *Kino*.—40s. refused for 3 cases good siftings, held at 45s. *Myrrh* unchanged and without business worth noting.

**HONEY.**—There was a good demand for *Jamaica*, of which about 90 barrels were sold at better prices, viz. 32s. 6d. for liquid, dark orange; 28s. to 26s. 6d. for thick, pale yellow to fair palish; 22s. to 24s. for more or less dark-coloured; 13s. for an almost black lot. Twenty cases *Venezuela*, which have been repeatedly offered, sold without reserve at 18s. per cwt.

**IPECACUANHA.**—Only 23 packages were offered. The demand is slack, and the article remains quiet, but at unchanged rates, 3s. to 3s. 2d. being paid for fair to good annulated, but slightly-damaged root.

**JABORANDI LEAVES** lower. 4d. per lb. was realised with difficulty for 5 bales pale greenish but small and broken leaves.

**JALAP** unchanged, with small sales at 5½d. per lb. for rather pale tubers.

**KAMALA** neglected. A lot of rather ordinary quality knocked down at the low price of 3d. per lb.

**LIME JUICE** in good request at 1s. 3½d. to 1s. 4½d. for *Jamaica*,



**MOSS.**—Thirty bales *Irish* of mixed colour, dark prevailing, held at 11s. per cwt.

**MUSK.**—Of *Tonquin* the show did not include anything very fine; 63s. 6d. to 65s. was paid for Pile I., fairly dry, but rather skinny; 61s. was refused for a well-trimmed but damp parcel, all the pods having underskins. Ordinary horny and false Pile III. realised 19s. Good but rather unsightly *Yunan* pods sold at 37s. 6d. Good, shaven Russian *Cabardine* held at 15s. Some grain musk sold at 59s. to 66s. for *Assam*, rather skinny and having a strongly developed ammonia odour.

**NUX VOMICA** sold well at steady rates. *Bombay*, fair to good bright at 10s. to 11s.; *Colombo*, small but pale, at 7s.; ditto sweepings, at 2s. 6d. to 5s.; small but pale *Cochin* held formerly at 7s., an offer of 6s. 9d. being declined for this lot.

**OILS (ESSENTIAL).**—*Aniseed*, *Cassia*, and *Cinnamon* unchanged and without business. One hundred cases *Citronella* unworked, guaranteed fair merchantable quality, sold "without reserve" at 64s. to 65s. per case. *Peppermint* American, H. G. H. brand unchanged, and sold at 16s. per lb., at which price 48 cases are still held. *Lemon* has been in livelier demand at improved rates. The Italian markets are very firm, and the price now quoted is 9s. per lb. f.o.b. Messina. It is stated on good authority that in the neighbourhood of Catania, Riposto, and Aci Reale the "lapillo" (cinders from Etna) have ruined many lemon-tree plantations. Lemons are now fetching from 25s. to 42s. per case in London.

**PATCHOULY LEAVES**—8½d. refused for 6 bales very stalky and dusty quality. This parcel is held at 10d. per lb.

**PISTACHIO NUTS.**—Three cases very good quality, from Kurrachee, remained unsold, eliciting no higher offer than 1s., which was, of course, not entertained.

**PUREE.**—7s. per lb. refused for a case of good yellow balls.

**RHUBARB.**—The large supply of 219 cases did not include any fine root, but lower prices were accepted for the lots sold, which included:—*Shensi*, sun-dried fair yellow coated, small to medium sized root, flat, at 1s. 2d.; ditto, high dried, rough in coat and country-damaged, half fair pinky fracture, at 11d. *Canton*, small to medium-sized root, yellow coated but spongy, flat and round mixed, at 1s. 3d.; dark coated, round, at 11d.; ordinary small country-damaged, round, at 8d. to 9½d. per lb.

**ROOTS.**—For 14 bales *Alkanet*, good genuine root, containing a large proportion of colouring matter, 26s. 6d. was refused. 346 bales *Galangal* sold without reserve, at 7s. 6d. to 9s. per cwt. A parcel of rather chumpy and partly dark *Gentian* held at 17s. per cwt., and 7 serons *Mogadore Orris* sold cheaply at the same figure. Six bales *Scammony*, which were well competed for, realised 35s., while 4 bales genuine *Senega*, rather chumpy, were knocked down at 1s. 11d. per lb.

**ROSE-WATER.**—A bid of ½d. per bottle was refused for a case containing 40 bottles of *Persian* rose-water of faint flavour.

**SARSAPARILLA.**—In all, 109 packages were offered. *Jamaica* in request and sold at about 1d. dearer rates, but *Guayaquil* is almost unsaleable, and for *Mexican* and *Honduras* there is no demand. *Jamaica*, good to fine grey, well bearded, sold at 1s. 8d. to 1s. 10d.; good red at 1s. 4d.; dull yellowish ditto at 1s.

**SEEDS (VARIOUS).**—Of *Aniseed* there is still a good deal offering, while trade is slack at present. Russian seed 29s. to 30s., Levant 40s. to 48s. per cwt. ex warehouse. China Star sold at 72s. 6d. for sound, unworked, 60s. to 65s. for mouldy and damaged ditto. Trade in *Canary* has been very active during the last fortnight. There have not been any fresh arrivals of seed, but some of the holders seem anxious to get out of stocks, and in some instances somewhat lower prices have been accepted for inferior qualities. The export demand to the Continent remains steady and buyers are eager to avail themselves of any favourable opportunity to replenish their slender stocks. But from the United States great stagnation is reported; considerable quantities of seed in excess of requirements have accumulated there, and prices are even below the level of our market. In Holland quotations remain unaltered. We quote ordinary

Turkish seed 45s. to 46s. 6d., Morocco 48s. to 55s. per 464 lbs. ex warehouse. Spanish seed up to 76s. The trade in Dutch *Caraway* was mostly supplied by seed from former importations, while very little business has been passing directly between Holland and England. In some cases lower figures have been accepted in order to clear; Dutch seed 34s. to 37s. per cwt. *Cummin* steady without alteration in value. In auction 12 bags *Malta* sold cheaply at 25s. to 26s. without reserve. There is a slight inquiry for *Fennel*, prices 21s. to 22s. per cwt. *Fenugreek* is now coming more prominently into demand for sowing purposes, but only low prices will tempt buyers. In *Linseed* a hardening tendency is observable, and prices have gained about 1s. on the last fortnight. *Bombay* 42s. 6d., *Calcutta* 40s. 6d. per 416 lbs. Dutch seed sells freely at reduced rates, and Sicilian is in great demand without supplies. A few bales of good flavoured West Indian *Musk* sold at 8d. per lb. The extreme scarcity of white *Mustard* has raised values very considerably; only very little of fine seed is obtainable. New brown *Bombay* mustard is steady at 5s. 6d. per bushel. Sowing *Rape* is now eagerly inquired after, and fine English fetches up to 50s. French seed rules very firm at 47s. to 48s. per 424 lbs. Crushing rapeseed, however, is well supplied, and without change in value.

**SENNA** continues to command extreme prices. There was a large quantity offered, numbering altogether 165 packages, nearly exclusively *Tinnevely*, of which the greater part was sold; very good pale green, at 1s.; fair to good bold greenish, 8d. to 10d.; small ditto, 4½d.; low, damaged part black, 1½d. to 3d.

**TAMARINDS.**—Some good pale *Barbadoes* and *Dominica* sold at 8s. to 8s. 6d. per cwt.

**SHELLAC.**—The transactions in this article have been limited. In sale on Tuesday 916 chests were offered, of which only about one-third part found purchasers, mainly because the goods were offered "without reserve." No fine orange was sold; second orange maintained the slight advance of the previous week, but buttonlac was slightly cheaper. The following prices were paid: Second orange, DACO Calcutta, triangle, 47s. to 48s.; TN diamond unworked, Calcutta weights and conditions, 44s. to 45s. Native orange NCB, &c., good at 47s. Button: RBBL 1, fair first 61s. to 62s.; CA house BL No. 1, dark second, 49s.; same mark, No. 2, inferior second, 47s. to 48s.; fair third, 38s. to 39s.; PB house BL, ordinary and very dark, 21s. Messrs. Ernsthausen & Co., shellac importers, have submitted to Mr. G. H. Ogston for analysis samples of transparent and opaque shellac, with a view to determine whether opacity influences the value of the lac. The following is Mr. Ogston's report:—

The three samples of shellac received from you have been very carefully examined with the object of discovering, if possible, the cause of the difference of colour and clearness occurring in a greater or less degree throughout the bulk.

The samples, as I understand, were all part of one parcel, No. 1 representing an average of the whole, No. 2 clear and transparent lac, without any admixture of No. 3, which was composed of fragments picked out from the bulk on account of their yellow colour and comparative opacity.

It was suggested, I believe, that arsenic might be found to be present in the opaque portions, and that it was the cause of that peculiar condition. It was found, however, upon analysis, that there was no arsenic in any of the specimens, and that no chemical difference exists in the composition of the clear and opaque portions of the lac.

The amount of mineral ash present is extremely small, .310 per cent. in the clear fragments and .300 per cent. in the opaque—figures that may be taken to be identical. There is, however, a slight variation in the loss sustained by the two samples on exposure to a temperature a few degrees above that of boiling water, viz 230° Fahr. for several hours. This loss consists chiefly of water, which is apparently mechanically included in the lac, but no doubt partly of volatile oils, which are driven off at a moderately low temperature. The loss in weight sustained by the clear lac was 2.050 per cent., and by the opaque sample of 2.370 per cent. In this respect only can I find the smallest difference between the samples, so far as their chemical composition is concerned. Examined under a fairly high power in the microscope, there is to be observed a minute granular struction in the opaque portions, and evidently the cause of the opacity. Upon being exposed



to the temperature above mentioned, however, to allow the lac just to soften, this granular struction disappears, and the resulting lac becomes quite as transparent and apparently rather less coloured than the original fragments. I am inclined, therefore, to believe that the opacity is due to a slight excess of water in an extremely minute state of division, and that this is occasioned by some variation in the mode of treatment of the lac at the time of converting it into "shell." This may be a different condition of the atmosphere—a different temperature at which the resin is melted, or a different condition of surface of the wood or metal upon which it is run.

It is evident, however, that the difference between the opaque and the transparent samples is not due to the addition of any foreign substance—that it is mainly one of surface condition, which may have been produced by the slight excess of water present in the one, and that the transparent condition is restored by softening the lac at quite a moderate temperature.

Accompanying this note are three samples of the shellac which have been softened in this way upon slips of glass, in order that their transparency may be compared. The shape of the fragments is retained on the glass, and they were selected, as nearly as could be judged, of the same thickness. In this series, No. 1 slip is the originally transparent fragment; No. 2 slip is a fragment which before softening was partly transparent and partly opaque along a well-defined line. No. 3 is the most opaque piece I could select, and it will be seen that this specimen is to all appearance the least coloured and the clearest of the whole, after the heating process.

I was told that the clear portions of the lac became opaque on exposure to light. I have exposed, however, portions that were quite transparent and some that were opaque over a portion of their surface, to as much direct sunlight as was to be had during the last ten days, without their undergoing any change.

I repeat, therefore, that there is no chemical difference between the opaque and the transparent portions of the shellac, and that, in my opinion, the former condition is entirely a mechanical one of condition of surface, possibly aided by the inclusion of a minute excess of water, that excess amounting to about .300 per cent.

SEEDLAC has realised an advance, small sales of fine bright *Kurrachee* having been made at 37s. 6d. per cwt.

WAX (BEES').—A large quantity (248 packages) met with very good inquiry and was mostly sold at steady rates, viz., *Jamaica*, good pale yellow to fine, 6l. 17s. 6d. to 7l. 10s.; partly dark to orange and yellow, 6l. 5s. to 6l. 10s.; *Australian*, one-third grey, rest yellow, 6l.; *Madagascar*, 90s.; *Mauritius*, partly grey to yellow, 90s. to 95s.; ditto, dark brown, 88s.

ACID (CITRIC) remains firm at the prices quoted in our last report, viz. 2s. 4d. per lb. for spot, and 2s. 4½d. per lb. for forward delivery, but on Thursday a parcel changed hands at 2s. 3½d. per lb. for spot.

ACID (TARTARIC).—Also firm at unaltered prices. In sale this day 18 casks *foreign* acid in crystals of fair quality were offered and sold at 1s. 7½d. per lb.

BORAX steady and in good demand. *English* is quoted at 29s. 6d. to 30s., foreign at 27s. per cwt.

CONCENTRATED LEMON-JUICE.—The imports from Sicily into the port of London during the first five months of 1886 are 635 pipes, against 2,252, 2,192, and 1,954 pipes in 1885, 1884, and 1883 respectively. This shows a decline in the supply of citric acid of 250 tons in 1886 as against 1885. In London the price of 34l. per pipe f.o.b. Messina has been paid, and there are further buyers at that figure. Holders both in Messina and Palermo are very firm.

MERCURIAL PREPARATIONS are 1d. per lb. dearer in consequence of the advance in quicksilver. *Calomel* is quoted at 2s. 8d. but *red iodide* remains unchanged at 8s. 9d. per lb. A further rise is probable.

QUICKSILVER.—At the moment of our going to press last week the importer increased his price to 6l. 15s., at which

rate considerable business has been transacted, and on Wednesday the price was further advanced to 6l. 17s. 6d. It is stated that second-hand holders do not offer anything, and that there is every prospect of a further increase.

SALTPETRE continues in a lifeless condition. *Bengal*, ref. 5 lb. per cwt. on the spot is quoted at 16s. per cwt. The stock on May 29 in London was (1886) 1,570 tons, (1885) 2,670 tons; the stock on May 1 in Liverpool was (1886) 10 tons. There were afloat on June 1 to Great Britain (1886) 1,550 tons, (1885) 2,620 tons. The deliveries to May 29 in London were (1886) 4,200, (1885) 3,480; the deliveries to May 1 in Liverpool were (1886) 590, (1885) 750.

SODA.—*Ash* unchanged. *Crystals* are tending further downward, having been offered here at 46s. per cwt. On the Tyne 40s. is asked.

SULPHATE OF AMMONIA.—The improvement continues steadily, though slowly. The present quotations are: grey, 24 per cent. spot, 11l. 5s. to 11l. 6s. 3d. both in London and Hull. It is noteworthy that this price is only slightly in excess of that quoted for nitrate of soda, although sulphate of ammonia for manurial purposes is worth about 3l. 10s. per ton. It is stated that efforts to educate the farming interest to a proper appreciation of the position of the article are now commencing to be very successful.

SULPHATE OF QUININE.—Mr. Thomas Whiffen informs us that he has reduced his prices for *Quinetum*, alkaloid and sulphates, to 1s. 7d. per oz. in bulk, or 1s. 9d. in vials. In our last issue the price of *quin. sulph.* "Fabbrica Lombarda" was mentioned at 1s. 5d. per lb.; this should have been 2s. 5d. The official quotation for this mark is now 2s. 4½d. Messrs. Howards still keep up their official quotations, but French sulphate "Pelletier" has been officially reduced to 2s. 9d. A transaction took place in London on Tuesday of 6,000 oz. *Jobst's* German sulphate of quinine in bulk at 2s. 3d. per lb., less 5 per cent. discount. This deserves attention all the more because the brand in question is one which has generally been quoted higher than other German makes, and which was rarely sold on the London market. For sale on Thursday 5,000 oz. *Boehringer's* and 800 oz. *Zimmer's* brand, in bulk, were offered, but found no buyer at 2s. 3d., and were bought in, 2s. 2d. being refused.

CLOVES.—At the beginning of this week an improvement became noticeable, and 8½d. was privately paid for good Zanzibar. Later in the week 8½d. to 8¾d. per lb. was paid, the market closing firm at the latter price.

GINGER.—Neglected and lower. *Cochin*, ordinary small hard dark rough, at 25s.; fair ordinary soft rough, 30s.; bold and medium bright washed, 43s. 6d. to 45s.; bold and medium, part cut, 53s. to 55s. 6d. *Malabar*, ordinary and rough, 19s. *Jamaica*, common to good common, 36s. to 39s.; part washed, 40s. to 42s.; middling to good middling, 50s. to 57s.; good bright, 66s.: 2 boxes fine bold sold at 6l. 15s.

MACE.—Reports as to the crop in the East Indies confirm the unfavourable rumours which have gained currency lately. In Banda the crop will be a very small one, and it is also stated that little can be expected from Padang and Penang. The arrivals which have come to hand until this date consist mostly of old mace. Under the circumstances it is not surprising that a firmer tendency should be manifest. *Penang*, ordinary to good red has been sold at 1s. 5d. to 1s. 8d., *West India*, ordinary to good at 1s. 3d. to 1s. 7d. per lb.

NUTMEGS.—See reports respecting the crop of mace, Notwithstanding the large quantity offering, the article has remained firm at steady rates.

PEPPER quiet and little doing.

PIMENTO remains unchanged, ordinary grey to good at 1½d. to 2½d. per lb.

TURMERIC again cheaper and plentifully offering. In sale on Tuesday the following lots were sold:—*Madras* pickings and fragments, at 9s. to 9s. 3d.; whole bulbs, rather rough in coat to good but wormy, 9s. 3d. to 12s. 3d.; finger and bulbs, mixed, bright, hard yellow, 11s.; ditto, rather bolder, 11s. 6d. to 13s. 6d. *Cochin*, finger, at 13s. *Bengal*, good root, dark fracture, 14s.

## THE AMERICAN MARKETS.

NEW YORK: May 29.

**DURING** the past week no improvement has been evinced in the drug market, whilst the general feeling of depression has, if anything, become more aggravated, and the tendency of prices has mostly been in favour of buyers.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can, therefore, see at a glance the course of this market compared with their own.

**BALSAMS.**—The 25 cases of Maracaibo *Copaiba* were taken for Germany at 28c. (1s. 3d.); with this exception, nothing has been done. A large wholesale house here is jobbing bright filtered Central American at 29c. (1s. 3½d.); such low rates cannot pay. *Tolu* shows no improvement, and it is thought it will be a considerable time before it does. True, no fresh arrivals have taken place, but it is supposed that supplies are held back at shipping ports. *Canada* appears to have dropped out of consumption.

**CURACAO ALOES.**—The market has been cleared by a large shipping house here, and now, with the exception of a few odd lots, the total stock is concentrated in firm hands. The price paid did not transpire, but, as importers were glad to be rid of the drug, it may be presumed to be a low one.

**CASCARA SAGRADA BARK** has advanced, owing to the return to the old rates of freight from California. For quantity, 6½c. (5¾d.) is the lowest price now quoted.

**CANELLA ALBA.**—Reports from the Bahamas state that, as this bark can now only be cut on the outlying islands, present rates do not offer sufficient inducement to the natives to go for it; and as stocks at Providence are exhausted, and are small here, higher prices must be looked for before long.

**TONCA BEANS.**—Owing to the attempt of a speculative firm to get control of the large stock of Paras here, prices are rather unsettled at present; good dark, partly frosted, however, can be bought for 40c. (1s. 9½d.) yet.

**GUARANA.**—For the parcel in first hands \$1 (4s. 6d.) was offered and refused.

**SPERMACEIL.**—The market price may now be said to be 40c. (1s. 8½d.), but no buyers appear, although cablegrams have been sent all over Europe.

**BEESEWAX.**—The demand for export has been quite steady, although mostly for small lots; no arrivals take place from the country; stocks are small, and an improvement might easily take place in prices. Light yellow Californian is dearer, price 30c. (7½s.); prime yellow Western, 27c. (6½s.); dark and mixed, 25c. (6½s.).

**COCA LEAVES.**—No business whatever is reported, and the general position of the market remains as last advised. Quotations are nominally unchanged.

**ESSENTIAL OILS.**—The market for *Cassia* is decidedly weak, single cases are selling at 65c. (3s.); while *Aniseed*, which took a slight upward move last week, has now come down to \$1.55 (7s.). *Sassafras* is quite neglected at 38c. (1s. 8d.). *Wintergreen* shows no improvement at \$1.80 (7s. 9d.). *Spearmint* scarce, nominally \$7 (29s. 6d.).

**MEXICAN SARSAPARILLA.**—This week 90 bales arrived, and easily found buyers at 7½c. (4¼d.); whether the large parcels now on the way will sell as readily is a question. It is thought they will. The demand is now from France and Germany.

**ROOTS.**—*Jalap* is unchanged in value. *Senega* has declined slightly, owing to the near approach of the new crop: best bright fibrous, 46c. (2s. 2d.); common grades, 42c. (2s.). *Serpentaria* is still scarce and dear, nominally 45c. (2s. 1½d.).

**QUININE.**—The demand for consumption is very slack, as the general expectancy is that lower prices will be reached before long; nobody will buy in quantity. German brands are being offered at 55c. (2s. 4d.), but no transactions of any magnitude are reported.

**OIL (PEPPERMINT).**—The market is dull, but unchanged. Cable reports of sale of H. G. Hotchkiss's brand in London at 15s. 9d. have had no effect as yet on holders here.

## (CABLEGRAM.)

Our New York correspondent telegraphed as follows on Thursday afternoon:—

**SULPHATE OF QUININE.**—The domestic makers have brought their prices on a level with those quoted by the German manufacturers. During the week very little has been done in the article, and as there is no sign of any re-animation of the market in the immediate future, it is generally thought that a further decline will be unavoidable.

**SARSAPARILLA.**—Heavy arrivals of *Mexican* root of the Vera Cruz variety have just been placed on our market.

**PEPPERMINT OIL.**—The extreme drought from which the growing districts are now suffering is causing serious damage to the plants. The article has, in consequence, not only undergone no depreciation in value, but the few owners into whose hands the great bulk of the stock is concentrated maintain their pretensions without showing any sign of weakness.

The following were the Stocks in the Port of London on May 31, with those for the corresponding date of the previous year:—

	1886	1885		1886	1885
Aloes .....cs	3,538	3,116	Gum (cont.)—		
" .....kegs	12	34	Damar ....pkgs	5,987	3,223
" .....gourds	49	298	Galbanum.. "	10	28
Aniseed, Star chts	326	207	Gamboge .. "	142	119
Arrowroot ....cks	15,531	14,123	Guaiacum .. "	29	75
" bxs & tins	2,670	4,462	Kino ..... "	145	161
Balsam.....cks, &c.	488	653	Kowrie .....tms	1,664	898
Bark, Medicinal			Mastic ....pkgs	127	185
cks & cs	6,309	3,059	Myrrh, E.I.	335	204
srns, &c.	57,636	73,514	Olibanum .. "	5,474	6,463
Borax.....pkgs	786	525	Sandarac .. "	1,467	1,439
Bees' wax ..bls & srns			Tragacanth .. "	1,775	1,706
cks & cs	1,386	861	Indigo, E.I. ..chts	19,434	16,835
cakes	1,227	514	Spanish ....srns	3,246	3,004
Wax, Jap. vgtbl. pk	1,755	855	Ipecac....cks & bgs	167	152
Camphor ....pkgs	6,675	8,316	Jalap .....bls	232	201
Cardamoms ..chits	905	816	Nux Vomica pkgs	929	954
Cochineal, srns, &c.	8,199	9,662	Oil—		
Cocc. Ind. bgs, &c.	384	405	Castor .....cks	520	509
Colombo root pkgs	847	1,392	" .....cs	7,310	5,110
Cream tartar ..cks	51	63	Palm .....tms	193	197
Cubeb.....bgs	20	165	Cocoonut .... "	1,934	2,797
Dragon's blood chits	137	150	Olive .....cks, &c.	1,950	1,652
Galls, China & Jap.			Aniseed .....cs	272	328
cs	3,210	3,499	Cassia .....cs	215	102
Trky & Prsn sks	5,760	3,935	Opium .....chits, &c.	1,843	2,212
Gum—			Plumbago....tms	3,767	2,220
Ammoniac' pkgs	326	235	Rhubarb.....chits	1,620	910
Animi & Copal			Saltpetre, Nit. Pot.		
pkgs	6,929	7,482	" .....tons	1,573	2,618
Arabic, all descriptions pkgs	20,276	8,418	Nitrate Soda .. "	6,188	1,583
Asafetida.. "	851	1,237	Sarsaparilla ....bls	600	352
Benjamin .. "	2,148	1,508	Senna ....bls, &c.	519	1,753
			Shellac .....chits	64,545	55,543
			Turmeric ....tons	1,563	619
			Vermilion, chits, &c.	30	—

## Legal Report.

IN the Chancery Division of the High Court of Justice on May 31, before Mr. Justice Chitty, an action was brought for the administration of the estate of the late Mr. Charles George Johnson Da Silva, a vendor of a patent medicine, who died in March last, leaving personal estate to the value of about 20,000*l.*, and also real estate. (See THE CHEMIST AND DRUGGIST, May 22, page 460.) In his will he directed that his estate should be administered by the Chancery Division of the High Court of Justice; and after bequeathing various annuities and legacies, he gave the residue of his estate to the Royal Medical Benevolent College, for the purpose of founding "Da Silva" exhibitions at that institution. It appeared that the Royal Medical Benevolent College was established by special Act of Parliament (18 & 19 Vict., c. 166), for the purpose of providing assistance for necessitous members of the medical profession and their families. Mr. Justice Chitty made an order for the administration of the estate. [Mr. Da Silva was the proprietor of Locock's Wafers.]





### Memoranda for Correspondents.

*Always send your proper name and address: we do not publish them unless you wish.*

*Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.*

*If you send us newspapers please mark what you wish us to read.*

*Ask us anything of pharmaceutical interest: we shall do our best to reply.*

### Lanoline.

*To The Chemist and Druggist—*

SIR,—Since my notes on lanoline appeared \* I have received from Messrs. Geo. Haller & Co. other two samples, one of which consists of lanoline containing 20 per cent. of water, and the other of anhydrous lanoline. As regards the former, it is very much superior, both in colour and odour, to anything I have yet seen, and the existence of the latter proves that my percentage as to the desirability of sending out dry or anhydrous lanoline had already been anticipated. The makers are prepared to supply anhydrous lanoline should it be preferred in that form, but they think it would be more convenient for chemists to receive it already mixed with 20 per cent. of water, as it would save trouble, and as the mixing could be done in a more thorough and efficient manner when carried out on a large scale at their works, while a safeguard against the article being sent out with an undue percentage of water might be found in the dispensing chemists insisting upon receiving it only in original packages. As to this last point, I have no fear that water would be added by the middle-men, my remarks being made to show that the tests given by Liebreich did not cover this possible source of sophistication. The anhydrous lanoline, which is guaranteed to be chemically pure, differs slightly from that which I dried myself, principally in being softer and also in being heavier. It has a specific gravity of .9084 at 95° C., which will be equal to about .937 at 50° C., which, in place of being lower, is in reality higher than that of most known fats. It is impossible to take the gravity of hydrous lanoline with any degree of satisfaction, for this reason, that the substance is too intractable at low temperatures, while at a high temperature a proportion of the water will be driven off; consequently this method for estimating its freedom from added water is unavailable. My suggestion regarding combinations of lanoline with the oleates has also been anticipated, Dr. Shoemaker having published a series of formulæ which meet nearly all requirements.

Hawick

THOMAS MABEN.

### Pharmaceutical Inaccuracies.

*To The Chemist and Druggist—*

SIR,—If not too late, I should like to make a few remarks in reference to your article on the above in THE CHEMIST AND DRUGGIST of May 15.

You fall foul of the word "specialty," and dub it "an ugly and quite a useless word," and instance "criminal, fatal, venal, brutal, and all others we can think of," as taking "the 'ity' to represent the substantive form of the quality indicated by the adjective." Now, you will observe that in each of these cases the addition of the affix "ity" does no violence to the pronunciation, nor does it disrupt the proper sequence of the syllables; whereas, in the word "special"—a dissyllable—upon adding "ity," you must either pronounce it spe-cial'-it-y—which no one outside Colney Hatch would think of doing

—or spe'-ci-al'-i-ty: by the latter course knocking a dis-into a tri-syllable—spe'-cial into spe'-ci-al—which is not done in any of the instances you give. For my part, I see nothing ugly in the word "specialty," made from the English adjective "special," any more than I do (although this does not piece in with "all others we can think of") in "cruelty," from "cruel"; "personalty," from "personal"; "mayoralty," from "mayoral"; "commonalty," from "common"; "royalty," from "royal," and so on. If its French form be insisted on, then by all means let us have it rigged up in the height of French fashion, with its two acute 'e's and its "spacialitay" pronunciation.

The fact is, Mr. Editor, there is too much of this Frenchifying of words. Look at the word "employé." Sometimes it is put in italics; sometimes in ordinary type. Its gender is formed à la française, and an infinitude of pains is taken by the writer or speaker to show, not that he knows his own language, but has an "Ahn's-First-French-Course" acquaintance with the dialect of the frog-eaters. We do not put "employ" in italics; nor "employer," nor "employment"; why, then, employé? Why not get rid of all trouble by using "employee" for masculine and feminine singular, and adding an "s" for plural in both genders? We should simply be following the genius of our mosaic language as exemplified in "payee," and words of a similar class, and *à-ha-sing* the French.

I should like to say a few words on the possessive case, but fear that I have already trespassed too much upon your valuable space. I am, sir, yours truly,

Hornsey, June 5.

OWL.

[“Owl's” remarks on the possessive case will be as welcome as are his interesting comments printed above.]

### Curious Breakages.

*To The Chemist and Druggist—*

SIR,—In response to your invitation for experiences of curious breakages I send the following. Some few years ago, when with a large firm in the North of England, whilst I was weighing pills from a 2-gallon glass bottle which I held under my arm, the bottle, without the slightest warning or any apparent cause, broke into a thousand pieces. I was alone at the time, and on my colleague's return a few minutes afterwards my improbable story of the curious way in which the smash had occurred was received by him with evident scepticism. When I took the bottle from its shelf it was perfectly sound, and nothing whatever came in contact with it during the time I held it.

Another curious smash, though of a different kind, occurred a few weeks ago. On entering the shop first thing one morning the floor was found to be white over, as if covered with snow, and the articles exposed on the counter were white over also, while bits of paper and broken glass were strewn everywhere. The débris was thicker as we approached what had evidently been the scene of an explosion; and in the centre of the litter and ruin were the shattered remains of a bottle of Lamplough's Pyretic Saline! The bottle had burst during the night, and I can only account for it by the supposition that the saline must have been put in a damp bottle, and the generation of gas had proceeded until it had gathered sufficient strength to burst the bottle.

Fortunate it was for us, and perhaps for some of our customers also, that the bursting-point was not reached during business hours.

Edinburgh, May 30.

Yours truly,

J. T. H.

### Bent Glass Cases.

Exactly the same thing happened with a glass case of mine as described by W. H. B. I was leaning over it talking to a gentleman when it made a loud report and cracked across. I finally accounted for it by noticing that one end of the case had gone off the counter on to the lower level of the moulding, and when restored to the level of the counter that the crack was much smaller. It broke its back I conclude.

R. S. S. (160/68.)

*To The Chemist and Druggist—*

SIR,—I have five on my counter, all of which have been broken by atmospheric influence once. Two had wooden ends,

\* THE CHEMIST AND DRUGGIST, p. 493.

three were bent metal frames. I had the grooves in the wooden ends cut larger to allow of expansion; and with the metal frame cases, the glass ends were replaced by wooden ones. I had two small holes made in each end to allow the temperature to be the same inside as out, and have not had a breakage since. A large glass dome with soap under cracked just in the same way. I had holes bored in the base board and have not been troubled with breakage or steaming since. I wonder the Glass Insurance Companies do not insist on ventilation as a preventive of accident.

COUNTY CHEMIST. (165/23.)

Mr. J. Lawrie, Blackpool, writes:—"I have a new bent-glass case, 4 feet long. When it had been in use about five months it 'went off' one night about ten P.M. with a loud crack. I was in the shop at the time, and everything around was perfectly still and quiet. This happened in the beginning of September after a very hot day; the temperature of the shop at the time was 73°. The shop is so built and situated that it gets intensely hot in warm weather, often 95° in the shade, and as the sun's rays strike directly on the broken case through the doorway, the glass had frequently before been subjected to very wide and rapid changes of temperature; for that reason I do not think that temperature had anything to do with the breaking of this glass. From the appearance of the edges of the fracture, which are chipped and splintered as if they were being tightly ground against each other, I have no doubt the fracture was caused by warping of the wood, which, probably, was not thoroughly seasoned. No warping is visible to the eye as the case stands on the counter, and I have not at present thought it wise to disturb it."

24/162. H. W. C. C. (Bristol).—**Electric Lighting.**—Everything depends on what kind of place you want to illuminate. Do you propose to use incandescent or arc lights? Have you any available power? Edison, Swan, Siemens, the Electrical Storage Co., and many other firms will instal you, and some are better in one respect, some in others. It is impossible to answer your question on such vague information as you give.

#### The Dose of Easton's Syrup.

To The Chemist and Druggist—

SIR,—I would be obliged if any of your numerous correspondents would kindly state what they would consider a dose of the above preparation for a weakly strumous child, four years of age, and if in any case they would think  $\text{ʒi.} = \frac{1}{32}$  gr. strychnine an overdose for the age stated.

I had occasion to dispense a prescription for the above preparation some time ago, assuming it was for an adult. I made no inquiries, but sent it out, the directions being a teaspoonful twice daily. Eventually it turned out it was for a child of the years already stated, and the result of its administration I leave your readers to judge for themselves.

In communicating with the prescriber, he assured me that it was quite common in his practice to order  $\text{ʒi.}$  doses, even to children two years of age, and with the best results to his little patients.

However, having some doubts regarding his (the prescriber's) statement, I have asked many *medical men* what dose they would give for the age stated, and the reply has been in every case that they would not give more than 10 or 15 minims, and even that with caution. Trusting you will find space for this in your next,

May 31, 1886.

A. P. S. (162/2.)

[What was the result of the dose which we are asked to judge for ourselves?]

#### Prescribing by Chemists and Dispensing by Doctors.

To The Chemist and Druggist—

SIR,—In your issue of May 22 there appeared a most interesting letter by Mr. Shepperson on the above subject, a letter that should command the attention of every member of the trade, and yet, I regret to say, not a single reply was published in your two last issues. I most heartily endorse

the remarks of Mr. Shepperson, and sincerely hope other members of the trade will ventilate their feelings on the subject.

Yours faithfully,

R. H. TRICKEY.

#### The Guinea Prize.

WHEN my simple tea was over, bright as bumble bees in clover,

Sat I down to read the journals, news, and lore;

Read about that guinea prize, which made hope within me rise,

Till some sand got in my eyes, and I soon began to snore,

Only then to dream a dream I had never had before,

For 'twas all about that guinea—nothing more.

Dreamt I then that I had won it; bought my wife a brand new bonnet;

Heard her thank me for the hundredth time or more.

Bought a cap for little Johnny, and a box to save his money.

Made right glad my other sonny, just by adding to his store

A gaily-painted horse he could drag across the floor

By a little bit of string—nothing more.

Thus I passed the time away, in this wild fantastic play;

Spent that precious golden guinea o'er and o'er.

Till a voice fell on mine ear—low in accent, sweet, but clear—

"Come, my darling hubby dear; see, your book is on the floor.

Why, my pet, you've been asleep for an hour or two, or more."

Then I woke to find a dream—nothing more.

Oh! the shock to nerves and senses brought the tears into my lenses,

And my face the marks of disappointment bore;

For it made me feel morose, when I knew that now of course Master Freddy's little horse would not "wheel" across the floor,

And my wife must wear a bonnet she had often worn before.

All because I missed that guinea—nothing more.

June 4.

DREAMER.

#### Furniture Polish.

To The Chemist and Druggist—

SIR,—I make the following furniture cream, but find it leaves finger-marks and is not so clean in use as other makers', such as Newth's, &c. Can you suggest anything that would improve it. I have tried an extra quantity of turps, also added a small quantity of liq. ammoniac, but with the same result.

Cerae alb. ang. . . . .	ʒviij.
Sapo. castill. . . . .	ʒij.
Spt. terebinth. . . . .	ʒxv.
Aquae . . . . .	ʒxv.

Dissolve the soap in water by heat, melt the wax, and add the turps. Mix and shake thoroughly. J. H. (272/28.)

[This is a typical bad formula, the quantity of wax in the polish unnecessarily increasing the labour of rubbing; white wax is also a bad rather than a good feature. The formula is better thus modified:—

Yellow wax . . . . .	ʒiss.
Common soap . . . . .	ʒvj.
Carbonate of potash . . . . .	ʒss.
Water . . . . .	ʒx.

Heat and stir all together until a milky mixture is formed, then transfer to a stone bottle and add

Turpentine . . . . .	ʒxv.
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by small portions, shaking well all the time. Continue to shake occasionally until cold, then add 1 oz. of solution of ammonia]

**Chemists' Book-keeping.**—There were some notes on this subject in our issues for last May, December, and January.

15/165. **Cheap Hair Oil.**—A. H. writes:—"I have for the last two months been using and selling 'American salad



oil,' costing 3s. per gallon, for hair-oil, and find it answers excellently. It is, in my opinion, quite as good as olive oil at 5s. 9d. per gallon. Thinking this might interest some of my brother chips who do a large hair-oil trade, I thought I would bring it under your notice." Cotton-seed oil is no doubt intended, and is already much employed for hair-oil, though perhaps it is often bought under the name and at the price of olive oil. We published an interesting article in April of last year, by Mr. Wm. Gilmour, on the characteristics of cotton-seed oil. The following extract from Mr. Gilmour's observations will show how suitable this oil must be for the purpose suggested:—"The refined oil, as has already been indicated, has no smell, but a pleasant nutty, sweet flavour, much superior to the finest olive, while it has admirable keeping properties, neither developing smell nor the acrid taste of other oils, even under lengthened exposure. I have a sample which has been kept in a bottle only half full, and not too carefully corked, for nearly ten years, and it has not developed the faintest smell, is still neutral, and, although it has lost the bland sweetness of the fresh oil, it is still a better oil than olive would be kept for ten months under similar conditions."

### St. Jacobs Oil.

To The Chemist and Druggist—

SIR,—Form published by "A. H.," 49/145, is out of it altogether. Turpentine is certainly one ingredient. Those suggested by "Asthma," 22/142, I think nearer the mark. I append a form which comes very near to the original in smell and use, but colour is brownish not reddish. There is also some other little difference which I cannot fairly make out.

	Parts		Parts
Camphor .. ..	4	Ol. terebinth. ..	50
Ol. origan. .. ..	2	Alkanet to colour.	
Ol. succini .. ..	1	Æther sulph. ..	4
Ol. lavender .. ..	1		

Yours truly,  
W. ROBINSON.

The following is an extract from the *Druggists' Circular*, issued a little time ago.—A. J. Z.

Having occasion to prepare the following, I was struck with its resemblance to "St. Jacobs Oil," both in odour, colour, and medical effect.

Thinking perhaps I was not far from right, I would submit it to your readers:—

Oil sassafras .. ..	3iv.
„ olive .. ..	3iv.
Camphor .. ..	3iv.
Chloroform .. ..	3iv.
Capsicum .. ..	3ij.
Spts. turpentine .. ..	3xxiv.

M.

Dissolve the camphor in the chloroform, add the oils, and lastly the capsicum and spirits of turpentine.

Yours respectfully,

H. ALLEN CLARK.

[In the July, 1882, number of his *Ephemeris*, p. 114, Dr. E. R. Squibb stated that St. Jacobs Oil appears to be a feeble and badly-made aconite liniment, and it consists mainly of water, ether, alcohol, turpentine, and a small proportion of aconite, with red colouring matter." It is possible that its composition has been changed since Dr. Squibb made his examination.—Ed. *Druggists' Circular*.]

4/162. *Agriculturist*.—Soluble Arsenical Sheep Dip.—(For fuller information refer to THE CHEMIST AND DRUGGIST April 1885, pages 216 and 238)

Acid arsenious .. ..	25 lbs.
Sodæ carbon (crude) ..	42 „
Aqua .. ..	4 pints
Sapo mollis .. ..	56 lbs.
Sapo carbolie .. ..	33 „
Sulph. viv. .. ..	15 „

Miscel. bene.

Directions.—Use 1 lb. of the composition to 10 gallons of liquor. This quantity will be sufficient for ten sheep.

### DISPENSING NOTES.

To The Chemist and Druggist:—

SIR,—A fortnight ago I dispensed the prescription given below, and two days afterwards had it returned (less two doses which had been taken), a perfectly gelatinous mass. It had every appearance of a perfect mixture when sent out, and remained so about twelve hours, when it turned in colour from almost transparent brown to opaque pink, and became thick andropy.

I am, &c.,  
NEMO.

Tinct. hamamelis .. ..	℥40.
Ext. ergotæ liq. .. ..	3j.
Spt. eth. chlor. .. ..	3j.
Syr. papav. alb. .. ..	3ij.
Tre. nuc. vom. .. ..	℥40.
Aque ad .. ..	3vij.

M. Cap. 3j. bis die.

[We shall be glad to receive the opinion of any who have experienced a similar difficulty.]

### A Changeable Ointment.

Liq. plumbi. acet. .. ..	3ij.
Aq. rosæ .. ..	3ij.
Ol. nucis .. ..	3iss.
Adeps .. ..	1lb.

J. D. B. mixes the liq. plumbi, ol. nucis, and 3iss of aqua rosæ into a thick cream, and then adds the lard; when this is thoroughly mixed he adds the rest of the aqua rosæ. In cold weather the ointment keeps well, but as soon as the weather is at all hot, the ointment turns quite yellow.

[The change in the colour would appear to be due to partial reduction of the lead salt to oxide.]

To The Chemist and Druggist—

SIR,—Can you kindly inform me how to dispense the following prescription so as to make a presentable mixture? I tried two or three ways, but gave it up as a bad job.

E. B. J. (New Zealand.)

Potassii iodidi .. ..	3iss.
Tr. cinicifug. .. ..	3j.
Tr. guaiaci am. .. ..	3j.
Tr. nucis vom. .. ..	3iss.
Aq. chloroformi ad .. ..	3iv.

M. 3ij, ter die sumend.

[The desired result can only be obtained by the addition of acacia. Make a mucilage of 2 drachms of the powdered gum with  $\frac{1}{2}$  oz. of chloroform water; dissolve the iodide in the rest of the water, and mix the mucilage with it: then add the tincture of guaiac to it, in small portions at a time, and with expert shaking, and the other tinctures in the same way.]

163/40. *Cymro*.—How can the following mixture be made presentable?—

Bismuth. subnit. .. ..	3ij.
Sodæ carb. .. ..	3ij.
Pulv. tragacanth. .. ..	3iij.
Ac. hydrocyan. dil. .. ..	℥24.
Infus. cascariillæ ad .. ..	3vj.

Mix.

[Not at all as written, unless a jelly is required, and if bicarbonate of soda, instead of the normal carbonate, is used, the mixture will give rise to trouble in any case, on account of the reaction between the soda and bismuth salts. From 20 to 30 grains of tragacanth would be quite sufficient. No doubt the quantity given is a mere slip on the part of the prescriber.]

What is meant by the words that I have underlined in the following?—

Ext. filicis aetheri	..	..	..	..	3ss.
Pulv. rad. valeriani	..	..	..	..	3j.
Spirit. saponat.	..	..	..	..	q.s.

M. f. pilulæ No. 30.

*Pule. cort. aurant. conspergend.* Denter in vitro.

S.—Three pills night and morning.

*Spiritus Saponatus*; German Pharmacopœia. *Pulv. cort. aurant. conspergend*; sprinkle with (or roll in) powdered orange-peel. *Denter in vitro*; freely translated, send them out in a pill-phial.

**Pill Pitting.**—Will you kindly advise *A Subscriber* the means of preventing pills from pitting. I gave a batch of compound rhubarb pills a coating with tolu; after drying the whole were slightly pitted.

[The B.P. mass is somewhat changeable since the glycerine has been added to it. First it is too soft, then it hardens in a few hours sufficiently for rolling out, and then in a week or so it softens again. The glycerine should be omitted if the pills are to be coated.]

Mr. Joseph Ince would be glad to receive answers to the following question:—To what extent is the dispenser justified in effecting the solution or suspension of an ingredient in a mixture which, though prescribed in an insoluble state, is yet to be given in accurately-divided doses?

11 St. Stephen's Avenue, Shepherd's Bush, W.

*Note to Dispensing Correspondents.*—No alteration should be made in a physician's prescription unless that alteration has the prescriber's sanction—if it is possible to get that conveniently. We refer simply to the pharmacy of the prescription. In any case the alteration should be marked on the prescription, for the guidance of other dispensers.

162/11. *O.*—**Pill Varnish.**—A solution of tolu residues in ether is a capital varnish. The residues are what remains from balsam of tolu after making the syrup. Mr. Martindale recommends a varnish composed of one part of sandarach and one of absolute alcohol. This also is an excellent varnish, although it dries more slowly than the tolu one.

162/69. *Apprentice (Horsham).*—Send us more of your sample of **Lupuline**. It is a bad specimen, but we received too little for complete examination.

**Powdered Liquorice, B. P.**—This correspondent puts the following question:—As the Pharm. Brit. 1885 does not order the powder of the decorticated liquorice root to be used in preparing pulv. glycyrr. co., would it be allowable to use the "non-decorticated"?

Properly you are not justified to use anything else than the powder of the unpeeled root; the lighter coloured powder is generally used because it is considered the best, but the Pharmacopœia does not sanction it.

160/19. *Ajax.*—**Infants' Food.**—We wish a form better than that published in our February and subsequent issues.

**Hand Grenades** are said to contain a saturated solution of ammonium chloride, sodium sulphate, and some carbonate; but, are you sure that you are not infringing a patent by making the solution?

164/22. *R. K.*—**Cucumber Ointment**—

	Parts
Benzoated lard	6
Spermaceti	2
Essence of cucumber	1

Melt the spermaceti with the lard, then keep it constantly in motion while it cools. Now beat the grease in a mortar, gradually adding the essence, continue to beat the whole

until the spirit is evaporated and the pomade is beautifully white. [Piesse.]

There is another preparation which contains cucumber juice. You can get the ointment from any wholesale house.

161/27. *Nemo.*—**Green Oil Insecticide.**—The preparation which you send appears to consist of a solution of soft soap in weak methylated spirit, with the addition of a small proportion of dumosa eucalyptus and citronella oils to flavour.

**Heel Ball.**—Paraffin, 4 parts; yellow wax, 1 part, melted together and poured into moulds. Add dropblack to produce "Black Ball."

#### Information Wanted.

**Glass Show Tablets (Manufacturers).**—Answer to 8/161, York Glass Company, York.—CYMRO.

164 1. *W. J. Williams.*—**Photography with Emulsions**, by W. de W. Abney, 1885 edition, is a most complete work. There are a number of less pretentious volumes, which you may get from 6d. upwards. Spiller's "Elementary Treatise on Photographic Chemistry," 6d., Piper & Carter, 5 Castle Street, Holborn, E.C., would suit you. (2) Perhaps.

163 10. *J. Hully.*—**Treatise on Diabetes.**—Dr. Pavy's Croonian lecture on diabetes, published by J. & A. Churchill, price 4s. 6d. The author of this work is considered an authority on the subject.

163 4. *G. Barber & Son.*—**Aniline Dyes.**—The chemistry of aniline dyes is considered in Gardner's "Bleaching, Dyeing, and Calico Printing" (Churchill), price 5s.

**Evaporating Lead Lotion.**—The following is used in one of the largest Yorkshire infirmaries:—

Liq. plumbi acet.	..	..	..	..	3j.
S.V.R.	..	..	..	..	3j.
Aqua font.	..	..	..	..	3xvj.

**Scouring Liquid ("The Original").**—A correspondent sends the following:—Dissolve 1 lb. of curd soap in shreds, and 1 oz. of carbonate of potash in six gallons of boiling water, and when cold add a gallon of solution of ammonia.

#### Essence of Peppermint (Bright).

Oil of peppermint	..	..	..	..	1 oz.
Rectified spirit	..	..	..	..	4 or 7 oz.

Put into an ordinary 16-oz. bottle and *agitate well* for about five minutes, when a perfectly bright essence will be formed.

164 54. *Yorkshire* sends the following in reply to correspondents of last week:

#### Unguentum Althææ.

	Oz.
Resin (Amber)	8
Cera flav.	12

Melt these in

Ol. lin.	..	..	..	..	6
Ol. rapii	..	..	..	..	16

Then add

Ol. palmæ	..	..	..	..	8
-----------	----	----	----	----	---

Stir well.

I have used it for years, and found it answer well. I have recently added paraffin molle, 4 oz. This latter addition is a great improvement, as it keeps the ointment soft and prevents the wax from caking.

163/56. **Lavender Water.**—The best preparation is that which contains the fewest ingredients. Dissolve  $\frac{1}{2}$  oz. of Mitcham oil of lavender in a pint of rectified spirit. Add a grain of musk, and allow to stand for a fortnight before filtering. The redistilled foreign oil may be used for a cheaper perfume.

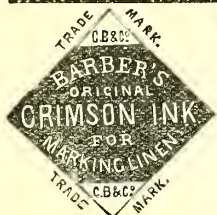


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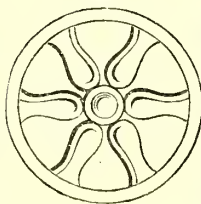
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EXTERNALLY: It has been used by *Bouchut* in *cutaneous carcinoma*, *Rossbach* for dissolving the false membrane of *Diphtheria* (see *Zeit. ch. für Klin. Med.*, vi. H. 6), by *Jacoby* of New York for the same purpose, and recently Prof. Finkler himself has restored patency to an œsophagus occluded by *carcinoma* by the continuous administration of a solution.

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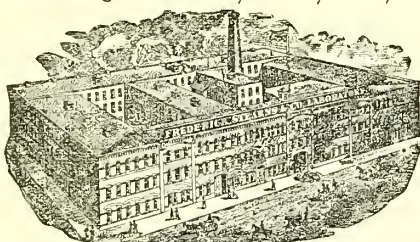
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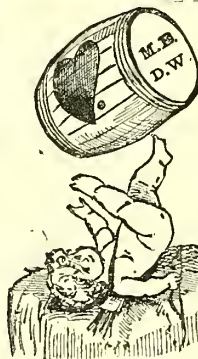
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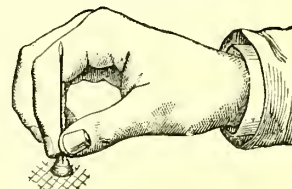
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Glass Bottles of every description, either Plain or Stoppered, made in White, Blue, Amber, Actinic Green, or any other colour required. Screw Nickel Capped Pomades, Honey Pots, Jelly Jars, &c., &c.

Makers of Opal Glass Covered Pots, in all sizes, which are far more Handsome and Cheaper than Earthenware.



H., R. & CO.'S PATENT GLASS SCREW STOPPERED FEEDING BOTTLES are the MOST PERFECT and Best to be obtained, and command a Ready Sale wherever introduced.

Special Attention given to Quality. Quotations Post Free to any part of the world on application. The above will be found the BEST and CHEAPEST HOUSE in the TRADE.

FOR  
DISPENSING, DRUGS,  
OILS,  
MINERAL WATERS,  
PERFUMERY,  
PATENT MEDICINES,  
&c., &c.

# GLASS BOTTLES

MANUFACTURED BY

## KILNER BROS.

FOR  
FEEDING.  
In GREEN &  
WHITE GLASS,  
and all  
Kinds of Fittings.  
Best Quality.

No. 3 GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.

HOME and FOREIGN BUYERS are invited to Correspond with us, as we have a very LARGE SELECTION to choose from  
*Send for our Illustrated Price Current—a Revised Edition just out.*

## THE NORTH LONDON GLASS BOTTLE CO.

(I. ISAACS & CO., Proprietors),

### OUR NEW SPÉCIALITÉ BOTTLES

THE HANDSOMEST DISPENSING BOTTLES MADE.

We supply them, 6-oz. and 8 oz., 10/ per gross; 3-oz. and 4-oz., 9/ per gross. Those requiring a first-rate Bottle should see them before ordering of any other house. We also continue to supply our Second Quality Bottles, with name in scroll if required, 6-oz. and 8 oz., 8/ per gross; 3-oz. and 4-oz., 7/ per gross. These are first-rate value for the money. White Phials at greatly reduced prices, which may be had on application; also a sample bottle of any kind sent free.

Bankers—London & Westminster Bank. Established 50 Years.

Warehouse: 25 Francis St., Tottenham Court Road, London, W.C.

## THE ORIGINAL ARNICATED WHITE FELT CORN AND BUNION PLASTERS,

INVENTED AND ESTABLISHED BY

### HENRY YOUNG,

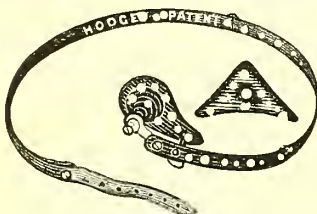
A.D. 1846,

AND FAVOURABLY KNOWN ALL OVER THE GLOBE.

SUPPLIED BY ALL WHOLESALE HOUSES.

N.B.—Please see that YOUNG'S Goods are supplied, as there are many worthless imitations.

Manufactory, 72 Clerkenwell Road, London, E.C.  
(LATE OF CARTHUSIAN STREET.)

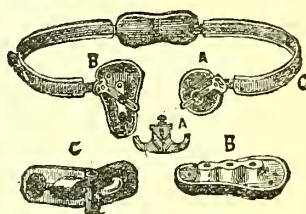


## HODGE'S IMPROVED TRUSS.

*The Lancet*, in recommending Hodge's Truss, on Oct. 3, says:—"The pad gives an elastic pressure—a very great advantage—enabling it to be worn with great comfort. The truss is light, though strong; possesses such advantages that it is comfortable, adapts itself readily to the movements of the body, and is very effective."

*British Medical Journal* says (Dec. 19):—"Hodge's Trusses have met with the high approval of surgeons who have had great experience in the treatment of rupture."

HODGE & CO., 327 OXFORD STREET, W.  
FACTORY: 18 JAMES STREET, W.



TO DENTISTS AND CHEMISTS.—Every description of Artificial Teeth made at greatly reduced charges. Best work and best materials only.

An Upper or Lower Set, inclusive of Teeth Rubber, &c., £1 1s.  
Ditto, ditto, on Platina, £2 2s.

*Send for Price List.*

Twenty years' experience in mechanical work.

LESSONS GIVEN IN MECHANICAL DENTISTRY.

F. BUCK, 6 Hanover Place, Upper Baker Street, London, N.W.

## SPECIAL HALF-YEARLY ISSUE OF THE CHEMIST AND DRUGGIST

Will take place on July 31, 1886,

When Price Lists, Circulars, &c., can be inserted. Apply early to the Publisher for full particulars.



**TRADE MANIFESTO.****WALKER, TROKE & CO.,**

WHOLESALE AND EXPORT DRUGGISTS,

82 CITY ROAD, LONDON, E.C.,

**Respectfully** solicit a share of the suffrages of the Trade. They base their claims to support upon their endeavour to carry on business upon the undermentioned principles :

Personal Management and Representation in Town.

Personal Representation in the Country.

Personal Identification with the interests of their Town, Country, and Foreign Customers.

**DRUGS, CHEMICALS, AND PHARMACEUTICAL PREPARATIONS,****BARRON, SQUIRE & CO.**

(LATE DREW, BARRON, &amp; CO.),

WHOLESALE &amp; EXPORT DRUGGISTS,

**BUSH LANE, LONDON, E.C.,**

MANUFACTURERS OF ALL DESCRIPTIONS OF PHARMACEUTICAL PREPARATIONS,

Beg to inform Merchants, Shippers, &amp;c., that all Indents entrusted to them will receive careful attention and prompt execution.

Messrs. B., S. & Co. request the attention of their friends and the Trade, at home and abroad, to their having PURCHASED THE BUSINESS of Messrs. JAMES BASS & SONS, Hatton Garden, and with it the various Formulæ from which their Special Preparations have been made, and pledge themselves to supply them in all their integrity.

*Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.***INTERNATIONAL FISHERIES EXHIBITION, LONDON, 1883.****COD LIVER OIL.**The Only GOLD MEDAL  
For British Exhibitors was awarded to**T. J. SMITH,**

10 &amp; 11 NORTH CHURCH SIDE, HULL.

Importer of Norwegian, Newfoundland, &amp; other varieties.

Low Quotations on application. Delivered at London or Liverpool.

**LIEBIG'S "IODIZED" COD LIVER OIL,**

ALMOST TASTELESS.

The powerful curative properties of this Oil have been fully demonstrated by the most eminent Physicians in Europe. It is well put up in Cardboard boxes, with tasteful, attractive Wrapper, suitable for first-class Shop Window or Counter-case.

Sells:—Imperial Pints, 4s. 6d., Half-pints, 2s. 6d.

PRICE DISPLAYED ON BOTTLE, LABEL, AND WRAPPER.

The Trade Mark, "IODIZED COD LIVER OIL," is moulded in the glass of every bottle.

SHOW CARDS AND COUNTER BILLS FORWARDED FREE.

Sole Proprietors:

**J. E. BEESLEY & SONS,**

Redcross St., Borough, London, S.E.

And through all Wholesale Houses.

**COMPOUND  
GLYCERINE LINCTUS.**

REGISTERED

TRADE MARK

**KOFKÜR** (COUGH CURE)

No. 40,927.

LABEL COPYRIGHT, STRICTLY PROTECTED.

Cure for Coughs, Bronchitis, Asthma, Influenza, Hay Fever, &amp;c., &amp;c. Invaluable to Professional Speakers and Singers.

Prepared only by the Inventor and Sole Proprietor,

**E. R. LEAROYD, Chemist, &c. (exam.), Sheffield, Eng.**

In Bottles at 1/- and 2/- each only; of all Chemists and Wholesale Dealers.



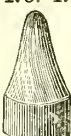



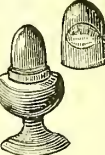
**BEWARE TO IMITATE THE ABOVE IS FELONY.**

N.B.—The great success of this preparation, owing to its remarkable efficacy (once sold it creates a demand for itself), has, of course, produced imitators, but vendors are WARNED that proceedings against such will be taken from time to time as may be considered desirable.

Export Agents—AYRTON &amp; SAUNDERS, 149 Duke St., Liverpool.



# MENTHOL CONES—A1 BRAND.

No. 1.  ORDER AS <b>A1</b> BRAND.	No. 2.  ORDER AS <b>A1</b> BRAND.	No. 4.  ORDER AS <b>A1</b> BRAND.	No. 5.  ORDER AS <b>A1</b> BRAND.	No. 6.  ORDER AS <b>A1</b> BRAND.	No. 7.  ORDER AS <b>A1</b> BRAND.	No. 8.  ORDER AS <b>A1</b> BRAND.
-6 Glass, 3/6 per doz.	-6 Willow Wood, 3/6 per doz.	1/- Menthol, on Wood Mount, in Screw- capped Glass Bottle, 6/9 per doz.	1/- Bullet Shape Cone, in Screw- capped Bottle, 6/9 per doz.	1/- Boxwood, Pedestal Shape, 5/- per doz.	1/- Boxwood, Barrel Shape, 6/- per doz.	1/- Boxwood, Acorn Shape, 6/- per doz.

No. 12,  
Polished Sycamore,  
3/6 per doz.

*Special Terms to Shippers  
and Large Buyers.*

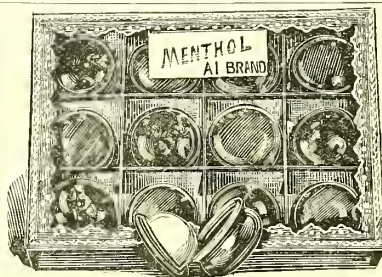
We still continue to  
give away an empty Show case  
with 2 doz. 1/ and 1 doz. 6d.  
sizes, or 5 doz. 6d. of our brand.  
The case is 11 in. long by 5 1/2 in.  
deep, and the lid lifts so that  
the goods can be sold from it,  
making it both a useful and at-  
tractive addition to a chemist's  
counter.

## GUARANTEED PURE JAPAN MENTHOL. NO STAMP REQUIRED.

Nos. 9 & 9a.



1/- & 1/6  
Boxwood,  
Skittle Shape,  
6/- and 7/9  
per doz.



No. 17.—Quite New. Draughtsman Shape, Ebony  
and Boxwood alternate. The most pocketable  
shape in the market. 7/3 per dozen.

Nos. 11 & 14.



-6 and 1/- Boxwood, Pyramid Shape, each in  
a separate cardboard box, 4/- and 6/6 per doz.

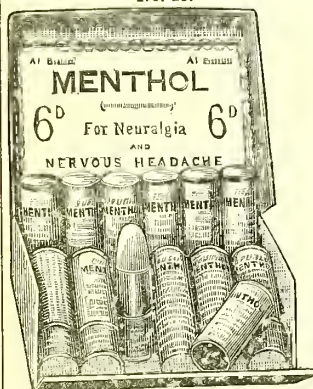
Ditto, 12 in hinged outer, without separate  
cardboard boxes, 3/6 and 6/3 per doz.

No. 13.—Vegetable Ivory  
Acorn or Skittle Shape, each  
in a separate box, 6/6 per doz.

No. 13a.—Ditto, 12 in a  
hinged outer, without sepa-  
rate cardboard boxes, 6/3 per  
doz.

*5 per cent. discount for  
cash with order, if sent  
direct.*

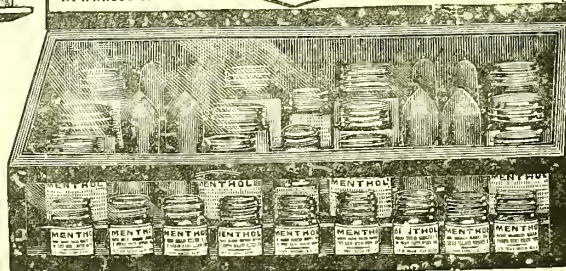
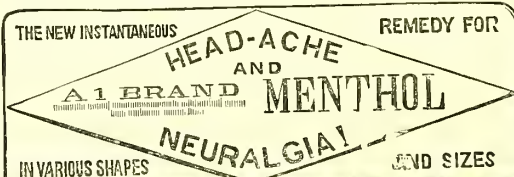
No. 15.



-6 Cardboard, pocketable, pretty,  
saleable, 3/4 per doz.

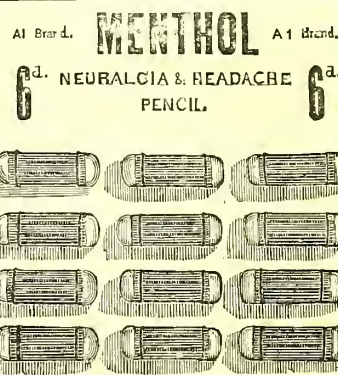
## MENTHOL versus HOT WEATHER.

We have endeavoured to meet the difficulty so often expe-  
rienced in showing Menthol during the warm weather, by  
supplying a show-case, 8 in. long by 4 in. deep, fitted with  
Dummies, for the nominal charge of 2/. This we will give  
away with orders of 6 doz. By this means the Menthols  
themselves can be kept in the cool.



Write for NEW  
PRICE LIST, sent post free  
on application. Want of space  
prevents our drawing suffi-  
cient attention to Novelties,  
&c., but in Price List full  
particulars are given.

No. 10.



-6, 12 on a card, 3/6 per doz.

The A1 Brand is put up in 19 dif-  
ferent forms, at prices to suit all cla-  
ses of trade. These prices we do not  
constantly vary, but endeavour to take  
a fair average of the market price of  
Menthol, and on that basis to supply  
at as low a price as possible com-  
patible with a good, reliable, and  
saleable article.

All shapes and sizes can be procured through any Wholesale House, or direct from

## J. G. SHIRLEY, PROPRIETOR A1 BRAND MENTHOL, 30 PATERNOSTER SQUARE, LONDON, E.C.

Telegraphic Address—"MENTHOL LONDON."

*Agencies undertaken for American Specialities and Novelties. Every facility afforded for their introduction.*



# INCREASE YOUR PROFITS

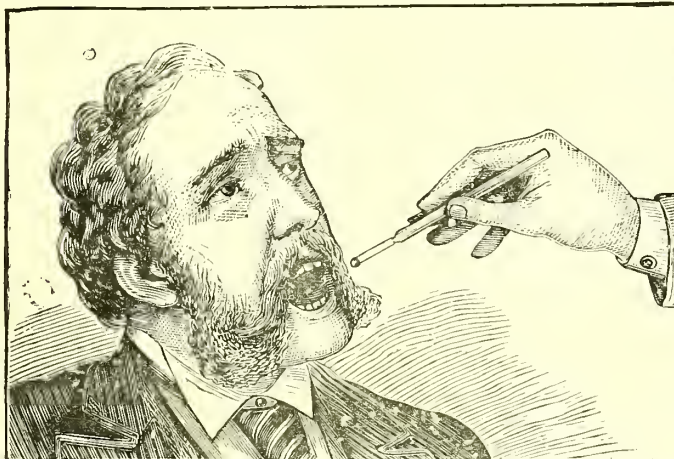
BY STOCKING AND SHOWING

## HARVEY'S { WORLD-FAMED TOOTHACHE The only "Toothache Pencil." Registered No. 15,048. "LONDON" CORN & WART } PENCILS

SOLD BY EVERY CHEMIST AND DRUGGIST THROUGHOUT THE WORLD.

Extract from "THE  
MONTHLY MAGAZINE"  
of Pharmacy, Chemistry,  
Medicine, &c., October, 1876.

At this particular time of the year we would desire to remind the trade of an article which is particularly saleable during the Winter Months when Tic, Face-ache, Neuralgia, and Toothache are not uncommon visitors. We allude to HARVEY'S World-famed Toothache



Pencils. Since these pencils were invented and introduced to the trade in 1873 the sale has been something marvellous (over a Million in two years). This wondrous success has been achieved entirely by their intrinsic value and usefulness—till Harvey's Toothache Pencils have become, with the public, Familiar in their Mouths as Household Words. These pencils have now a large sale in Canada, United States, India, and Australia.

SOLD BY ALL THE WHOLESALE DRUGGISTS' SUNDRYMEN AND MEDICINE VENDORS.

# ENORMOUS REDUCTION.

"ACME" BRAND (Registered No. 38537).

## MENTHOL CONES,

GUARANTEED PURE JAPAN MENTHOL.

92. Nickel Screw-capped Bottle,  
2s. 6d. doz., 6d. size.

90. Nickel Screw-capped Bottle,  
3s. 9d. doz., 1s. size.

89. Nickel Screw-capped Bottle,  
4s. 7d. doz., 1s. 6d. size.

88. Hardwood Boxes, Pedestal Shape,  
2s. 9d. doz., 1s. size.

161. Boxwood Boxes, Acorn Shape,  
Screw Lids, 4s. 2d. doz., 1s. size.

162. Boxwood Boxes, Pedestal Shape,  
Screw Lids, 4s. 2d. doz., 1s. size.

163. Vegetable Ivory, Acorn Shape,  
Screw Lids, 5s. doz., 1s. size.

201. Boxwood Boxes, Barrel Shape,  
4s. 2d. doz., 1s. size.

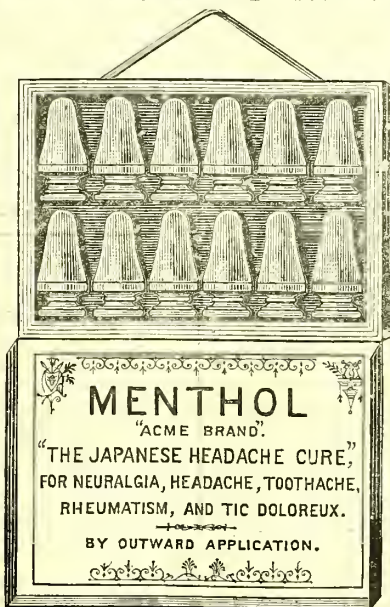
202. Boxwood Boxes, Bullet Shape,  
4s. 2d. doz., 1s. size.

203. Boxwood Boxes, Cone Shape,  
4s. 2d. doz., 1s. size.

200. The new 6d. Pedestal Shape Cone, in Glass-fronted Boxes, very handsomely labelled, as block, forming a good show case, 3s. doz., 6d. size.

Hanging Glass-fronted Boxes (like 200), with Nos. 161, 162, 163, 201, 202, and 203.

Cones supplied loose at lowest prices. 5 per cent. discount for cash with order. In ordering please quote numbers to avoid mistake.



In Indenting through Merchants and the Wholesale Trade please state distinctly, "ACME" BRAND, "HARVEY'S."

No. 200.

Sole Proprietors: HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, W.





BY SPECIAL  
APPOINTMENT.

# SPRATTS PATENT MEAT "FIBRINE" VEGETABLE DOG CAKES



BY SPECIAL  
APPOINTMENT.

(WITH BEETROOT).

**DOG MEDICINES** for the Cure of Distemper, Worms, Mange, Eczema, Ear Canker, Rheumatism, and the various other Canine Diseases. Full List and Pamphlet on Canine Diseases, post free.

**'COMMON SENSE OF DOG DOCTORING,'** price 6d. **DOG SOAP.**

**LOCURIUM.** Price 6d. and 2s. per Bottle, retail. A Patent Vegetable Oil, curing Sore Feet in Dogs, Cracked Heels, Broken Knees, or Sore Backs in Horses; and Sores, Bites, and Wounds of all kinds either in man or beast. Small Pamphlets on Canine Diseases supplied free for distribution.

WHOLESALE  
TERMS OF

**SPRATTS PATENT LIMITED, LONDON, S.E.,**

OR YOUR WHOLESALE  
HOUSE.

**THE SCOUR  
IN LAMBS CURED  
BY  
THE DEVONSHIRE  
COMPOUND.**

A distinct prepara-  
tion from the Devon-  
shire Oils.

In Bottles, 2/-

**ESTABLISHED 1830**

**FOR CATTLE  
HORSES  
COWS CALVES  
SHEEP LAMBS  
DOGS &c.**

Both  
for Outward  
and Inward Use

**MANUFACTORY  
WELLINGTON SOM**

**CORNER'S PINE'S**

**DEVONSHIRE OILS**

**SOLD EVERYWHERE**

**THE GREAT  
REMEDY  
FOR ACCIDENTS  
AND ANIMAL  
AILMENTS.**

Supplied  
by all  
Wholesale  
Houses

**PRICE 2/-**

**CORNER'S  
FAMILY  
EMBROCATION**

**CURES—**  
Sore Throats,  
Colds and Pains in  
the Chest,  
Lumbago,  
Scalds, Burns,  
Chilblains, Sprains,  
&c., &c.

**1s. 1½d.**

## HORSES.—LIEUT. JAMES' BLISTER

(Manufactured by R. J. JAMES, the Grandson of the Inventor).

THIS CELEBRATED BLISTER IS NOW OFFERED TO THE TRADE AT THE FOLLOWING REDUCED PRICES:—  
 1 oz. pots from 14/- per doz. to 12/6 per doz. 1 lb. pots from £4 4 0 per doz. to £4 0 0  
 2 " " £1 5 6 " £1 3 0 " 1 " " 7 16 0 " 7 10 0  
 4 " " 2 8 0 " 2 4 0 "

Observe the Trade Mark.—"A Horse's Head on the top of each Pot, and the signature, R. J. James."

Wholesale Agents, BUTLER & CRISPE, 4 Cheapside; NEWBURY, 37 Newgate Street; MAW, SON & THOMPSON, 11 Aldersgate Street; HAYES & CO., Dublin; GOULDING, Cork; FOGGITT, Thirsk; and SANG & BARKER, Edinburgh. Agents for the Colonies required. Apply, with reference, to R. J. JAMES, South Retford, Notts.

**JAMES v. JAMES.**—LORD ROMILLY, the Master of the Halls, on February 23, 1872, declared "that I had an equal right with other members of the Inventor's family possessing the receipt to make and sell this Blister."—R. J. JAMES.

## CARBOLICA

Is the Best and Cheapest NON-POISONOUS DISINFECTANT. CARBOLICA POWDER is put up in large and small tins and packets; also in bags and casks. CARBOLICA FLUIDS can be had in stoppered bottles of all sizes; also in drums and casks. CARBOLIC ACID, 95 per cent.—CARBOLATED CREOSOTE—CHLORIDE OF LIME, &c., &c.

ALL GOODS produced in BEST STYLE at LOWEST PRICES.

Special Quotations to shippers and large buyers.

For WHOLESALE PRICE LIST apply to the CHEAPEST HOUSE in the TRADE, HAMILTON & CO., 118 High St., Wandsworth, London, S.W.

## FOUND DEAD.

In the house. Thirty-six Mice were found dead by using one packet of SANFORD'S MICE POISON. Mice eat it readily and found dead on the spot. Sold in packets at 3d., 6d., and 1s. each. TRY SANFORD'S CELEBRATED RAT POISON and see its wonderful effect. 210 rats were found dead by one dressing with it by Mr. Ramplly, Manor Farm, Boughton, Hunts.—130 rats were found dead in wheat stacks by Mr. Paine, Caxton. It is, without doubt, the best ever introduced. Price, 6d., 1s., and 2s., of SANFORD & SON, Sandy, Bedfordshire. London Agents—Barclay, Edwards, Sanger, Sutton, and others.

## OKELL'S ORIGINAL MONA BOUQUET

Retail, 1/ 1/9, & 3/6; Wholesale, 7/ 12/ & 22/6 per doz. This much-admired Perfume (first introduced by the late Joseph Okell) may be obtained from the leading Patent Medicine Houses, Wholesale Druggists, and Druggists' Sundry Dealers.

Sole Consignee—THOMAS WEST, 59 and 61 Chester Road, Stretford, Lancashire.

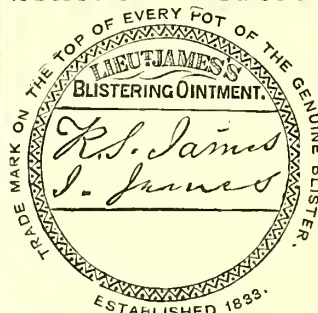
Special Agents—B. G. LENNON & CO., London, and Port Elizabeth, Cape Town, and East London, South Africa.

## ESTABLISHED 1833. HORSES.—LIEUT. JAMES' BLISTER.

### CAUTION.

The annexed Label is at the top of every Pot of the ORIGINAL and only GENUINE BLISTER.

The Messrs. Barclay & Sons, 95 Farringdon Street, London, and Messrs. Raimes & Co., Edinburgh, are now and have been Agents 52 years.



**AGENTS:—**Sutton & Co., 10 Bow Chnrohyard; W. Edwards & Son, 157 Queen Victoria Street; Newbery & Son, 37 Newgate Street; Evans, Lescher & Evans, Bartholomew Close; Burgoyne, Burdidges & Co., 16 Coleman Street; Lynch & Co., 171A Aldersgate Street; Southall Brothers and Barclays, Birmingham; R. Hovenden & Sons, 93 & 95 City Road, Finsbury; Sanger & Son, 150 Oxford Street; Millard & Sons, 40 Charterhouse Square; Corry & Soper, Shad Thames; A. A. Campbell, Leadenhall Street, London; Woolley, Sons & Co., 59 Market Street, Manchester; Apothecaries Company, Virginia St., Glasgow; John Thompson, 58 Hanover Street, Liverpool; Boileau & Co., Bride Street, Dublin; McMaster & Co., 121 & 122 Capel Street, Dublin; Clarke & McMullen, Victoria Street, Belfast; D. Galbraith, Londonderry; M. C. Delacre, Pharmacie Anglaise, Bruxelles. And by all Chemists, in Pots, 1/6, 2/9, 5/9, and 16/.

**COLONIAL AGENTS:—**MELBOURNE and WELLINGTON: Felton, Grimwade & Co.; SYDNEY, BRISBANE, and LAUNCESTON: Elliott Bros. & Co.; DUNEDIN and AUCKLAND: Kempthorne, Prosser & Co.; CALCUTTA: Smith, 71, 73, and 75, Strand.

W. H. JAMES, Sole Manufacturer, STAMFORD, FARRINGTON, BERKS. Advertised in "Bell's Li'e" 56 years. Beware of Spurious imitations.



# SOMETHING REALLY NEW!!

## THE "Very" BRUSH

### FOR THE HAIR.

PATENTED IN ENGLAND, UNITED STATES, FRANCE, BELGIUM, GERMANY.

EXQUISITELY CHARMING *on the Skin of the Head.*  
 THOROUGHLY EFFECTIVE *in arranging the Hair.*  
 MORE DURABLE THAN } THE OLD-FASHIONED  
 AND } STYLE  
 ONE-THIRD THE PRICE OF } OF HAIR BRUSH.

For centuries Brushmakers have aimed at Improvements in Toilet Brushes. The great aim always being to so make a Brush that the Bristles should go through the hair, and not merely pass over it. By this Invention we can now offer

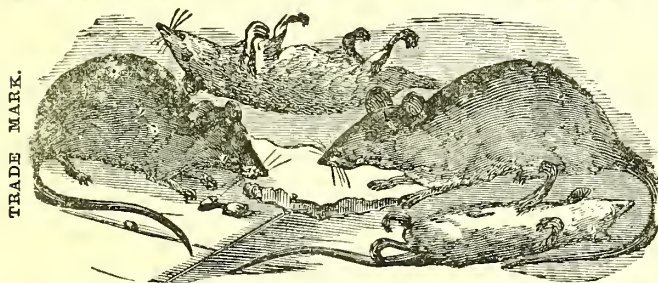
### THE "VERY" BRUSH

For the purpose. Retail prices from 2/. Each Brush is fitted with a novel Leather Sheath, suitable for the daintiest Toilet Table, which will at once recommend itself to the public as a neat and economic utility.

TO BE HAD OF ALL WHOLESALE HOUSES, OR OF

Messrs. HINDE, of BIRMINGHAM, LONDON, & PARIS.

### BATTLE'S VERMIN KILLER. { Mice eat it readily and Die on the spot.



Has an immense Sale, and wherever introduced never fails to give satisfaction.—Mice appear attracted to it as by magic, eat it readily, tumble over, and die on the spot. Rats usually die in their runs.—Parties troubled with Vermin may be cleared at once, either from Stacks, Houses, or Ships.

#### TESTIMONIALS.—Thousands might be published.

From Mr. THOMAS COLTON, Agent for Selby.—A friend of mine purchased a Packet of your VERMIN KILLER last night, doubting its efficacy; to-day he called in to say that he had found fifteen dead mice, and had only used part of a packet.—From Mr. EDWARD STURDY, Flemington Mills.—I duly received by post the Packet of your VERMIN KILLER, and found it as represented in your advertisement. It speedily destroyed all the mice in my granary. I enclose 2s. for two more Packets.—Leeds, November 6th, 1887.—I have tried BATTLE'S VERMIN KILLER, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS S. CROSLAND.—Mr. Stead.

Sold in Packets, 3d., 6d., and 1s. each.

SOLE PROPRIETOR:

Mr. J. R. BATTLE, Chemist, Lincoln, England.

No Chemist or Storekeeper should be without a supply.

## INSECT DEATH,



The WONDERFUL DUST discovered and used by ROWLAND WARD, F.Z.S., for

KILLING PESTILENT AND DESTRUCTIVE INSECTS.

Sold everywhere, in Closed Tins, 6d., 1/, and 2/6 each, post free.

ROWLAND WARD & CO., 166 PICCADILLY.

Wholesale: R. HOVENDEN & SONS, LONDON, and all large houses.

INDEX TO ADVERTISEMENTS.

See pages v-vii.

# NOTICE OF REMOVAL.

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**WILLIAM TOOGOOD,**  
WHOLESALE AND EXPORT  
**GLASS BOTTLE MANUFACTURER**  
AND  
**DRUGGISTS' SUNDRYMAN,**  
HAS REMOVED FROM  
**35, 36 & 37 MOUNT STREET, GROSVENOR SQUARE, W.,**  
TO  
**BURLINGTON BUILDINGS,**  
**HEDDON STREET, REGENT STREET, LONDON, W.**

---

## TO OUR CLIENTS AND FRIENDS.

SIRS,—

On the occasion of advising you of our change of address, consequent, firstly, by the expiration of leases of premises which we have occupied for the past 56 years, and, secondly, by the necessity of obtaining greater accommodation to meet an increasing trade, we take the opportunity of thanking our friends for the support which has been accorded to us in the past, and to hope that we shall meet, not only with the same, but an increased support in our new premises.

Having greater facilities, our stock will be gradually extended to meet all requirements of the Trade, and our system of administration will be such as to secure the prompt execution of all orders entrusted to our care.

Our Show Room will contain a full line of samples of our manufactures, and we solicit a visit of inspection from all our friends—town, country, colonial, and foreign.

Yours truly,

**WILLIAM TOOGOOD.**

---

AUSTRALIAN AGENCY AND SAMPLE ROOM:

Mr. A. I. JOSEPH, Bond Street, Sydney.

Telegraphic Address: "TOOGOOD LONDON."

Telephone No. 3834.

*William Toogood's Price Current of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.*

**SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.**



# S. MAW, SON & THOMPSON'S Bath Gloves, Rubbers, &c.

	Gloves. (Pairs.)	Straps.	Pads.		Gloves. (Pairs.)	Straps.	Pads.
CALEFACIO OR BADEN, No. 1, soft Brown . . . per doz.	6/4	10/8	6/0	HONEYCOMB, White. per doz.	5/4	10/8	5/6
CALEFACIO OR BADEN, No. 2, hard Brown . . . per doz.	6/4	10/8	6/0	REVERSIBLE, No. 1, one side soft Brown, the other best White Turkish . . . per doz.	7/0	12/0	6/0
CALEFACIO OR BADEN, No. 3, soft Brown, assorted patterns, per doz.	6/8	11/4	6/0	REVERSIBLE, No. 2, one side hard Brown, the other White Honeycomb . . . per doz.	7/0	12/0	6/0
CALEFACIO OR BADEN, as- sorted patterns, export quality, per doz.	4/0	(Red labels)		REVERSIBLE, No. 3, one side Egyptian Loofah, the other best White Turkish, per doz., single	8/0	—	—
CALEFACIO (the U.S.), Striped soft Brown . . . per doz.	6/8	11/4	6/0				

TURKISH GLOVES, per doz. pairs, 3/- & 4/-

Ditto BEST QUALITY „ 5/-

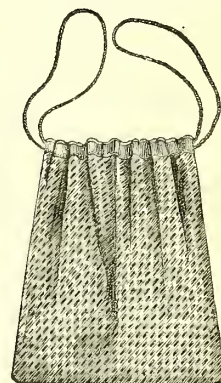
PADS, per doz. 4/-

„ „ 5/6

## S. MAW, SON & THOMPSON'S WATERPROOF CHECK SPONGE BAGS.

	No. 1	2	3	4	5	6
	7×6	8×7	9×8	10×9	11×10	12×11 inches.
Best Quality	6/0	7/0	9/0	11/0	12/6	16/0 per dozen.
Second ditto	4/6	5/3	6/6	8/0	9/3	11/6 „

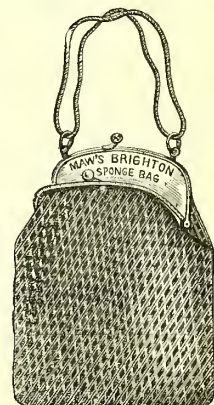
For other descriptions, see Quarterly Price Current, page 101.



## S. MAW, SON & THOMPSON'S BRIGHTON SPONGE BAGS,

WITH BALL CLASP FASTENINGS, NICKEL-PLATED.

	No.	2	3	4	5	6
		8×7	9×8	10×9	11×10	12×11 inches.
CHECK...	...	16/0	18/0	20/0	26/0	28/0 per dozen.
PAISLEY	...	18/0	20/0	22/0	28/0	32/0 „



THE BRIGHTON  
SPONGE BAG.

## S. MAW, SON & THOMPSON, LONDON.

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MEDICAL LABEL AND GENERAL PRINTERS, ENGRAVERS, &c.,  
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Chemically prepared and guaranteed to be thoroughly effectual; printed with own name and address and advertisements on the four sides. Specimens and Prices on application.

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ON GOOD PAPER, AT LOWEST PRICES EVER OFFERED.

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ALL OTHER SIZES AT EQUALLY LOW RATES. SAMPLES AND PRICES ON APPLICATION.

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Sole Agents for **CHARLES RICHARD'S PATENT PERFECT TUBE CLEANER FOR INFANTS' BOTTLE-TUBES.** 6s. 6d. per gross; Carded, 8s. per gross.

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**APPARATUS AND MATERIALS**  
OF ALL KINDS.

Porcelain, Glass, and Papier Maché Dishes.

**CARD AND VIEW MOUNTS, ETC.**

**NEW WHOLESALE PRICE LIST for DEALERS ONLY**  
POST FREE ON APPLICATION.

**G F S**  
SUPERIOR GUARANTEED SUPERIOR QUALITY.  
CONCENTRATED  
EXTRA STRONG.  
EXTRA PALE.  
SIZE

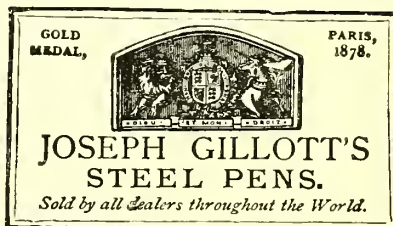
More economical than ordinary Size; more readily prepared for use.  
In 1 lb. Packets, in Boxes of 28, 56, and 112 lbs.

**GEORGE FARMIOE & SONS,**  
Lead, Colour, and Varnish Merchants,  
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BLACKING MAKERS,  
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(The Original Makers),  
Debnam's Road, South Bermondsey Station,  
LONDON.



**INDEX TO ADVERTISEMENTS,**

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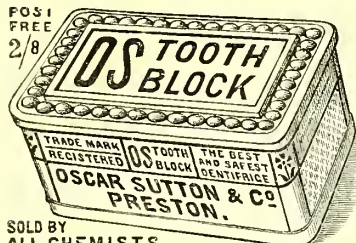


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**O.S. TOOTH BLOCK.**

Be particular to observe that the Registered Trade Mark and the name "OSCAR SUTTON & CO." are stamped on all that are genuine, *as worthless imitations are in the market.*

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Write to the above address for particulars.

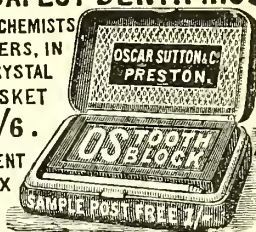
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SOLD BY ALL CHEMISTS  
AND PERFUMERS, IN  
ELEGANT CRYSTAL  
TOILET CASKET

PRICE 2/6.

ALSO IN PATENT  
METALLIC BOX

PRICE 1/-



SILVER MEDAL  
I.H.E. 1884.



THE ONLY  
MEDAL AWARDED  
FOR THIS  
SPECIALITY

**CHLORIDE OF LIME!**  
IN AIRTIGHT WATERPROOF & ODOURLESS PACKAGES  
INVENTORS AND MANUFACTURERS **NATIONAL CHEMICAL CO. LONDON**

THE N. C. Cos. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN  
ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS &c.  
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BEWARE  
OF OTHER  
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Used in  
the Royal  
Nurseries,  
and highly  
recom-

mended by the Faculty; it  
protects the Skin from cold  
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serves the Complexion.

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Boxes.

SOLD BY ALL THE WHOLESALE HOUSES.

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This Unique Preparation has the extraordinary  
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**HAIR IN CURL.**

Now used by Ladies in all  
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Needs but an introduc-  
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a ready and  
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(REGISTERED)

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Circulars profusely supplied.

Foreign and Colonial Chemists  
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**WHEELER'S GLYCERINE JELLY** is  
NOT LIABLE to Patent Medicine Stamp  
Duty. Any stock held bearing labels issued prior to  
1st of January last may be EXCHANGED on re-  
turning it to the Wholesale House it was obtained  
from, or direct from 143 HACKNEY ROAD,  
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Please observe the new label now in use is  
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**"BROKEN CHILBLAINS."**

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POWDER OR PASTE

IS THE BEST DENTIFRICE.

It is scientifically prepared by a Dental Surgeon, of large practice and  
great experience, and is intended to supply a long felt want, viz., a  
Preparation that will thoroughly cleanse the Teeth, and at the same time  
help to preserve them. As a stimulant to the Gums, and a preservative  
of the Teeth, Rozalium is not to be surpassed: it gives to the Teeth a  
pearly whiteness, to the Gums a healthy rosy colour, whilst it prevents  
decay by neutralizing the acids which accumulate between the Teeth, and  
imparts to the Breath a most delicious fragrance.

In Boxes, Pots, and Bottles, 1s. 6d. and 2s. 6d.

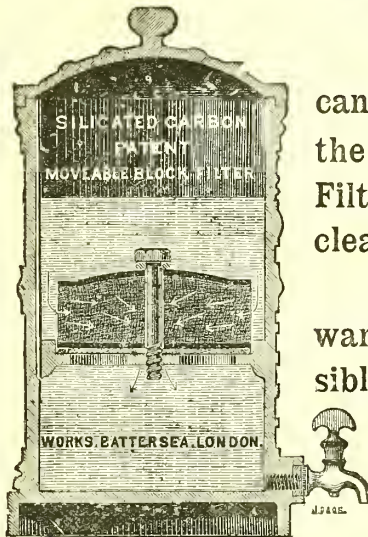
May be obtained from the Wholesale Houses, or direct from the  
Proprietor—

**J. W. MARTIN, Dental Surgeon,**  
PENG E.



# SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.

LIBERAL DISCOUNT TO THE TRADE.

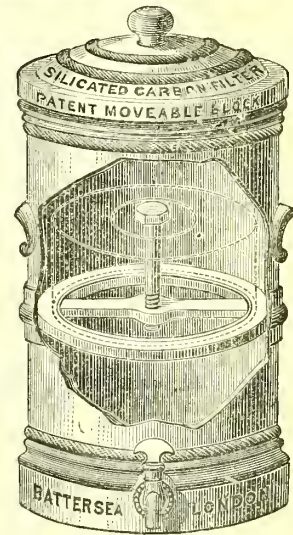


(Section.)

The Silicated Carbon Block can be instantly removed, leaving the whole of the interior of the Filter OPEN for inspection and cleansing.

The working parts are stone-ware, and no corrosion is possible.

No loose Pan or inner vessel to cause breakage.



(Elevation with Block removed.)

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Domestic Filters (as above), in Cream-coloured Stone-ware, with Plated Taps and Patent Movable Blocks:—

No. 27. O. $\frac{1}{2}$ gal. 10/6 each.	D. 6 gals. 42/- each.
A. 1 " 14/6 "	E. 8 " 52/- "
B. 2 " 21/- "	F. 12 " 70/- "
C. 4 " 32/- "	

Dining Room Filters, in Marbled China, with Plated Taps and Patent Movable Blocks:—

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B. 5 " 80/- "

Refrigerative Terra Cotta, do. do.:—

No. 25. 2 gals. 31/6 "
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In ordering please state "with patent movable block."

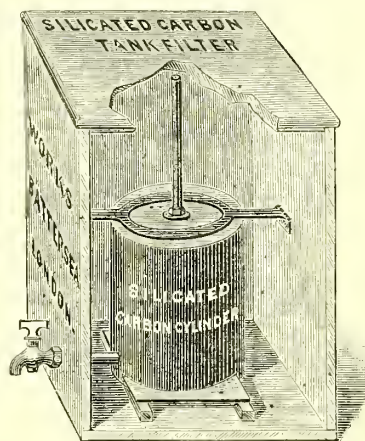
## PRIZE FILTER, With Patent Movable Block.



No. 23.

Price, with Plated Tap, £3 10s. 0d.

## TANK FILTER.



No. 41.

No. A, 10 gallons.	No. B, 20 gallons.	No. C, 40 gallons.
£3 3s. 0d.	£4 4s. 0d.	£6 6s. 0d. each.

## SHIP FILTER.

Wicker Covered, with Patent Movable Block.



No. 26.

	£	s.	d.	
$\frac{1}{2}$ gallon..	0	10	6	each.
1 " ..	0	15	0	"
2 " ..	1	2	0	"
4 " ..	1	16	0	"
6 " ..	2	8	0	"
8 " ..	2	17	6	"
10 " ..	3	8	0	"

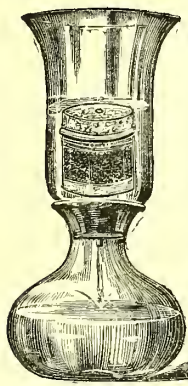
FOR FULL ILLUSTRATED LISTS WRITE TO THE

# SILICATED CARBON FILTER COMPANY,

CHURCH ROAD, BATTERSEA, LONDON, S.W.



# CHEAP GLASS FILTERS.



Style "K."

The **ONLY** Reliable  
Filters.

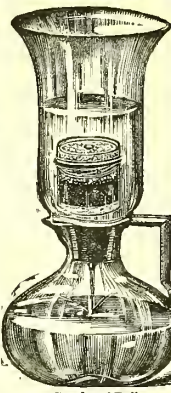
Made at **OUR OWN**  
Glass Works.

No Intermediate Profits.

STYLE "K."—Plain: 1 pint, 2/;  
2 pints, 3/; 3 pints, 4/; Engraved:  
1 pint, 2/6; 2 pints, 4/; 3 pints, 5/.

STYLE "L."—Plain: 1 pint, 3/;  
2 pints, 4/; 3 pints, 5/; Engraved:  
1 pint, 3/6; 2 pints, 5/; 3 pints, 6/.

STYLE "M."—Plain: 1 pint, 4/;  
2 pints, 5/6; 3 pints, 6/6; Engraved:  
1 pint, 4/6; 2 pints, 6/6; 3 pints, 7/6.



Style "L."

Very **LIBERAL** Discount  
to the Trade.

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ORMSIDE STREET,  
OLD KENT ROAD, LONDON.

**D. JUDSON & SON**  
(LIM.),  
SOUTHWARK STREET,  
LONDON.



Style "M."

# THE CHAMBERLAND-PASTEUR FILTER.

This Filter originates in the laboratory of the celebrated Prof. Pasteur, of Paris, and embodies the results of many years' investigation by Prof. Pasteur and his collaborateur, Dr. Chamberland.

It completely sterilizes water, removing all impurities, while at the same time the aëration of the water is retained. The special porcelain filtering tubes employed are cleansed by simple washing, and as no impurity can penetrate them they need no renewing, and can never deliver impure water.

These Filters may be used with or without pressure, and to supply all requirements, from those of a family to those of a village or town, as well as to filter other liquids, such as acids, spirits, &c.

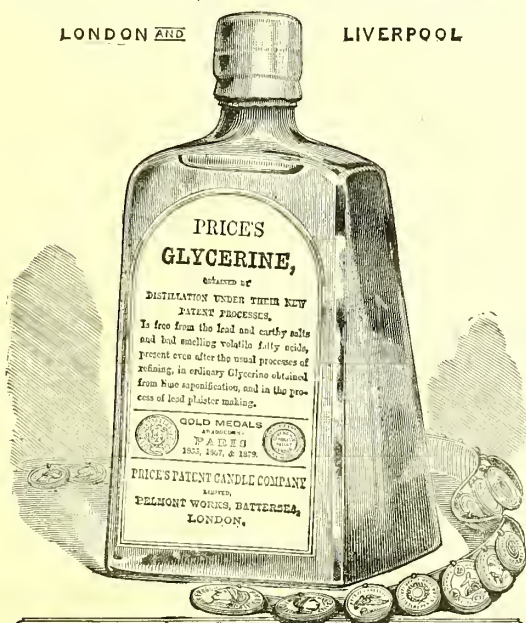
SOLE CONCESSIONAIRES:

**THE PASTEUR FILTER CO.,** 29 QUEEN STREET, LONDON, E.C.  
CANNON STREET,

PRICE'S PATENT CANDLE COMPANY LIMITED.

LONDON AND

LIVERPOOL



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HAS RECEIVED THE HIGHEST AWARDS AT ALL THE  
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PREPARED

**DANDELION**  
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MADE WITH PURE

**DANDELION ROOT & THE FINEST  
COFFEE.**

Sold in Tins, at 8d., 1s. 6d., & 3s. each.

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Best known Cleanser, Preserver, and  
Beautifier of the Teeth.

Supplied by the Patent Medicine Houses on the  
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<p><b>INCREASE YOUR INCOME.</b></p> <p>We are now appointing Agents for our renowned Indian Teas, in <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, and 1 lb. Packets. Gives no trouble; interferes not with ordinary business; and ensures a COMFORTABLE INCOME.</p> <p>Applications to BROOKE, BOND, &amp; Co., Wholesale Tea Blenders to the Trade, 17, Piccadilly, Manchester.</p>	<p><i>Two Shillings?</i></p>  <p><i>Impossible!</i></p>	<p><b>THE Most Admirable TEA</b></p> <p><b>@2/- per lb</b> <b>Sold only by</b> <b>BROOKE, BOND &amp; Co</b> <b>PICCADILLY &amp; MARKET ST</b> <b>MANCHESTER.</b></p>
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FINE COFFEES (Roasted)— [9d.] [10d.] [11d.] [1/1] [1/1] [1/2] [1/3] [Mocha, 1/4] [Finest Mysore, 1/5]

In 28-lb., 56-lb., or 112-lb. bags; also supplied raw or ground. Terms cash, less  $2\frac{1}{2}$  per cent. discount.

THE NEW FRENCH COFFEE **CAFÉ FRANÇAIS** To sell at 10d., 1/1, and 1/4;  
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FULL PARTICULARS, PRICE LISTS, SAMPLES, AND ANY INFORMATION ON RECEIPT OF TRADE CARD.

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A MONEY SAVING TEA. ABSOLUTELY PURE.

The small leaf from some of the finest India and China Teas. Produces a Tea in the cup, stronger, richer, and cheaper than most whole-leaf Teas. Agents appointed, where unrepresented, throughout the United Kingdom.

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BEST at the PRICE EVER SOLD. Great strength and a most useful Tea where there is a large consumption. Recommended to all who wish to SAVE in their Tea. Agents appointed, where unrepresented, throughout the United Kingdom.

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AGENTS APPOINTED, where unrepresented, throughout the United Kingdom.

Prospectus and Samples Free on Application.

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P.O.O. payable at head office. Bankers, the National Provincial Bank of England.

"laden with the scent of flowers,  
And breath of odorous Spring."

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A company of Merchants are now selling through SPINNER & CO. the choicest Teas that come from India and China at 2/8, 2/4, 2/-, and 1/8 a pound, in packets only. These are the perfection of Teas, and will please the most fastidious.—Agents wanted in every town and village. For Terms apply to SPINNER & CO., 60 Strand, London.

SPINNER & CO., London and Liverpool.

## TOWER TEA

A SAFE and PROFITABLE addition to a Chemist's Business.

For retail at

The London Broken Tea ... 1/8

The London Two Shilling Tea... 2/-

The London 2/8 Assam Tea... 2/8



For Testimonials and References see the full page Advertisement which appears monthly in this Journal. Last insertion May 23, page xv.

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**LONDON.**

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Awarded Gold Medals at Paris, Naples, and Brussels.

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RADLAUER'S ESSENCE OF PINES, per bottle, 1/3, less 33 1/3 per cent.

PATENT SPRAY PRODUCER, 1/7 1/2; TAMARIND CONFECTION, similar to

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NEW TAPE-WORM REMEDY (consisting of Extract of Fern, Kousso, and

Castor Oil), per box, 3/-, less 50 per cent.; in elastic capsules.

PURE MENTHOL CONES, in wood cases, 5/6 per dozen; MUSTARD CONES,

4/- per dozen; FRESH SQUILLS, 4/- per 11 lbs.; PASTA GUMMOSA, 2/3

per lb.; SALAMMONIAC TABLETS, black, 2/3 per lb., silver-coated, 3/5

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SOAP, BIRCH-BALM SOAP, SOAP OF LILY-JUICE, 3/- per dozen;

RADLAUER'S ICHTHYOL SOAP, large cakes, 8/- per dozen, small cakes,

5/- per dozen, guaranteed to contain 10 per cent. Ichthyol; SALICYL-

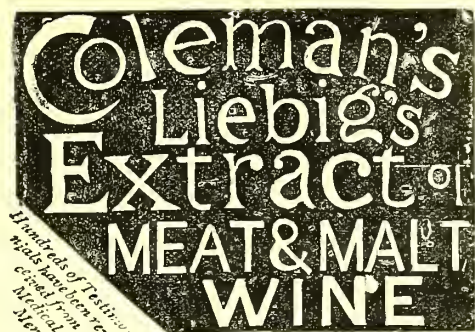
VASELINE COLD CREAM, in fancy boxes, 1/-, less 33 1/3 per cent.; INSECT

POWDER, made from genuine Dalmatian flowers, very effectual, in fancy

boxes, 1d., 2d., and 7 1/2d., less 30 per cent.

ONE MONTH DRAFT.





Is a Delicious Beverage and Tonic made from Port Wine, Liebig's Extract of Meat and Extract of Malt.

**NUTRITIOUS, STRENGTHENING,  
STIMULATING**

*Flesh-forming, and Health-restoring.*

SUITABLE FOR THE ROBUST IN HEALTH  
AS WELL AS THE INVALID.

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Wellington House, Bruce Street, Leeds,  
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I wish you would send me one dozen bottles, and then will send you money by return. You can send it by rail by G.E.R. on to the G.N.R., and then it will come direct to Leeds.

I am, yours truly,

**M. K. HARGREAVES, M.D.**

Sold by all Druggists, Wine Merchants, and Patent Medicine Vendors in the United Kingdom, in Bottles, 2s. 9d. and 4s. 6d. each.

Ask for COLEMAN'S LIEBIG'S EXTRACT OF MEAT AND MALT WINE, and "see that you get it."

2/9 size, 30s. per doz. 4/6 size, 50s. per doz.

Carriage paid to any Railway Station in Great Britain.

Sample Pint Bottle sent free by Post on receipt of 33 stamps.

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EIGHT PRIZE MEDALS AWARDED.

**GOODALL'S  
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**Yorkshire Relish**

THE MOST DELICIOUS SAUCE IN THE WORLD.

This cheap and excellent Sauce makes the plainest viands palatable, and the daintiest dishes more delicious. To Chops and Steaks, Fish, &c., it is incomparable. Sold by Grocers, Oilmen, Chemists, &c., in Bottles, 6d., 1s., and 2s. each.

CAUTION.—On each Yorkshire Relish Label is a Willow Pattern Plate and name, GOODALL, BACKHOUSE & Co. No other is genuine.

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THE BEST IN THE WORLD.

Makes delicious Puddings without Eggs, Pastry without Butter, and beautiful light Bread without Yeast. In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

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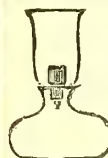
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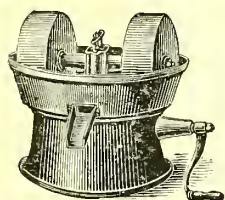
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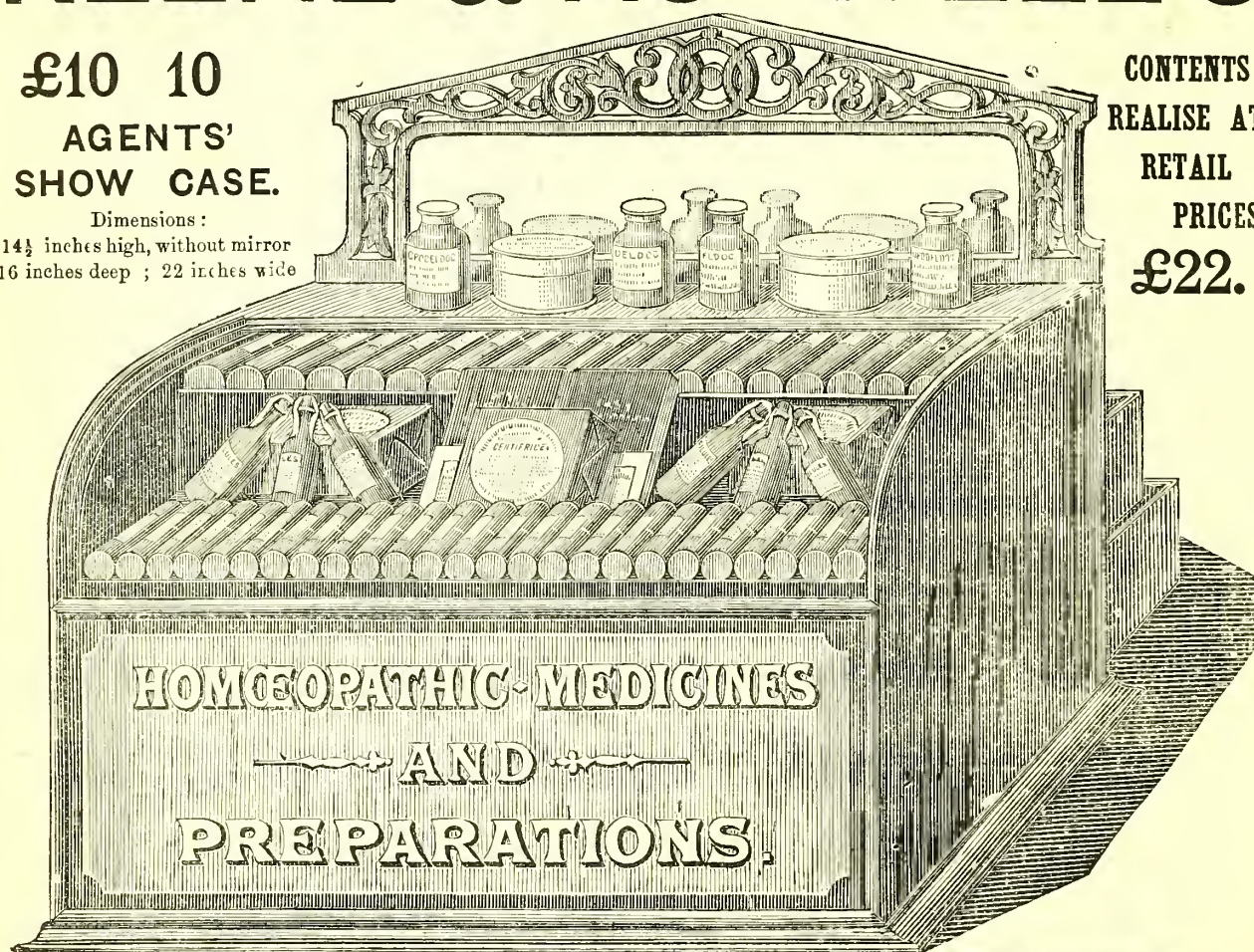
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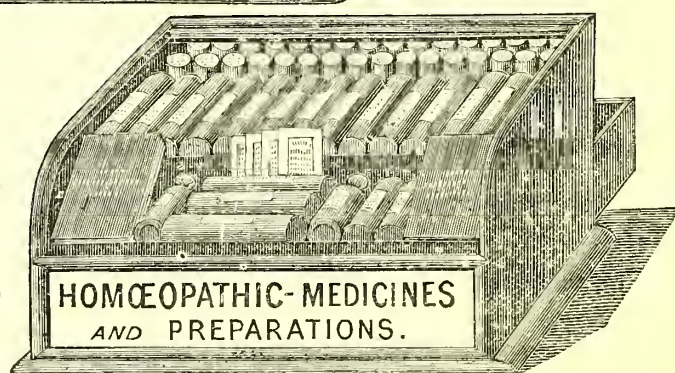


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